

93

CITY OF PATTERSON
GENERAL PLAN
Public Review Draft
BACKGROUND REPORT

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY
JUN 20 2013
UNIVERSITY OF CALIFORNIA

September 8, 1988

J. LAURENCE MINTIER & ASSOCIATES
AND
ASSOCIATED CONSULTANTS



CITY OF PATTERSON
GENERAL PLAN :
BACKGROUND REPORT.

CITY OF PATTERSON

City Council

Wade Bingham, Mayor
Leo Halseth, Mayor Pro Tem
Kay Corwin
Angelo Ielmini
Tom Klein

Planning Commission

Sam Hibma, Chairman
Mary Solorio-Brandt, Vice Chairman
Peter Buchanan
Robert Glick

City Staff

John Nachbar, City Manager
Harter Bruch, Acting Planning Director
Eric Brown, Planning Director
Ignacio Lopez, Public Works Director
Joe Bene, Recreation Director
Richard Bull, Police Chief
Richard Gaiser, Fire Chief

**MCCUTCHEN, DOYLE, BROWN
& ENERSEN LIBRARY
WALNUT CREEK, CA**

DEMCO

CONSULANT TEAM

J. Laurence Mintier & Associates, Planning Consultants
Joseph R. Holland, Consulting Traffic Engineer
Jones & Stokes Associates, Environmental Planning and
Natural Resources Sciences
Brown-Buntin Associates, Consultants in Acoustics
Pepper Associates, Urban Design Consultants

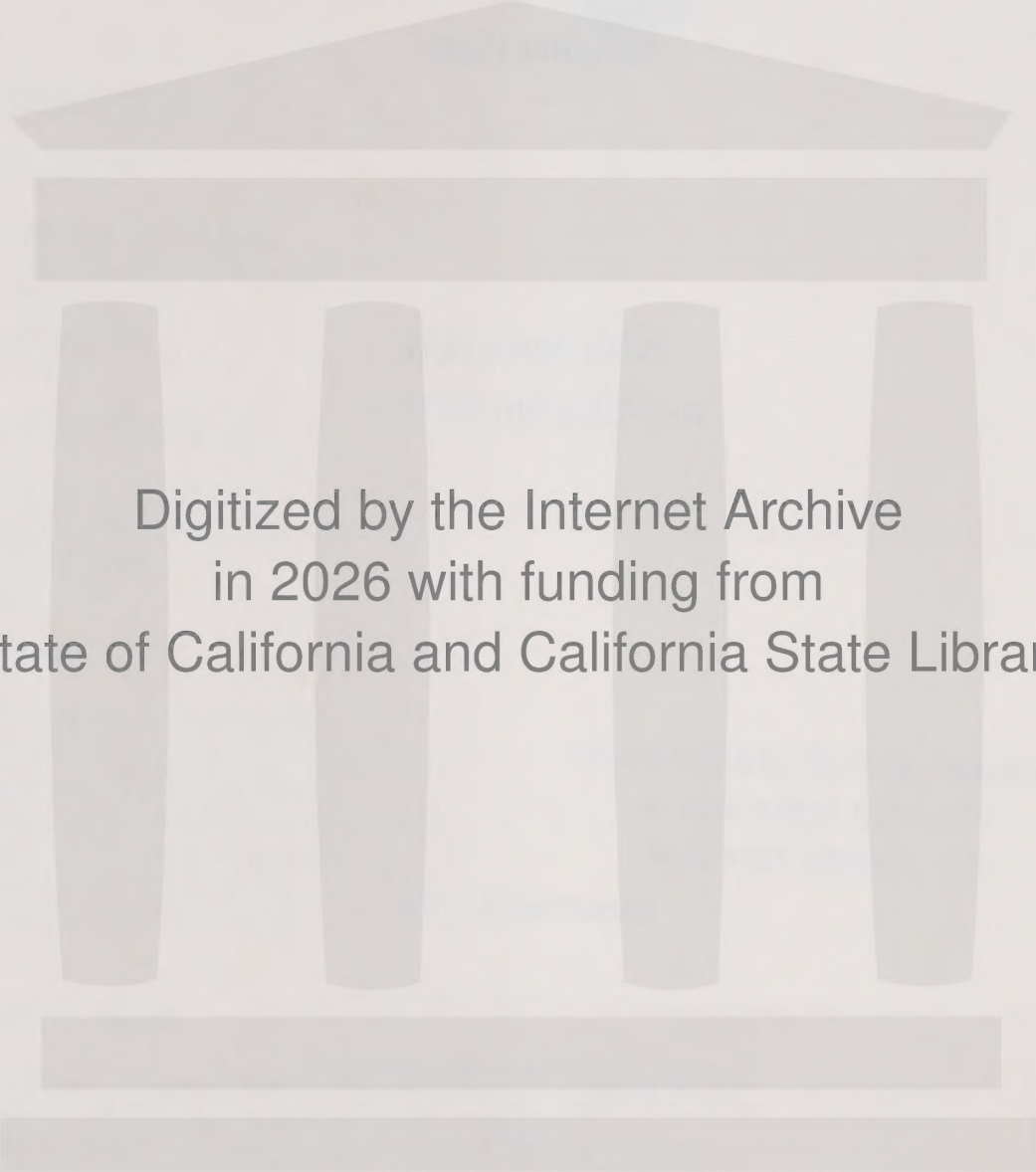
HT 168
P378
M56
1988
IGSL
UCB

CITY OF PATTERSON
GENERAL PLAN

Public Review Draft
BACKGROUND REPORT

September 8, 1988

J. Laurence Mintier & Associates
and
Associated Consultants



Digitized by the Internet Archive
in 2026 with funding from
State of California and California State Library

<https://archive.org/details/C124881101>

TABLE OF CONTENTS

INTRODUCTION	1
CHAPTER I: LAND USE	I-1
INTRODUCTION	I-1
REGIONAL SETTING	I-1
CITY LIMITS AND PLANNING AREA	I-1
HISTORY OF LAND USE PLANNING IN PATTERSON	I-1
ANNEXATION HISTORY AND POLICY	I-3
ZONING	I-5
EXISTING LAND USE	I-8
LOCAL AGENCY FORMATION COMMISSION AND LAFCO SPHERE OF INFLUENCE	I-10
COUNTY PLANNING AND LAND USE REGULATION	I-11
OTHER PLANS AND LAND USE REGULATIONS AFFECTING PATTERSON	I-13
FINDINGS	I-20
PERSONS CONSULTED	I-21
BIBLIOGRAPHY	I-22
CHAPTER II: HOUSING	II-1
INTRODUCTION	II-1
HOUSING STOCK PROFILE	II-1
HOUSING NEEDS	II-7
AVAILABILITY OF LAND AND SERVICES FOR RESIDENTIAL DEVELOPMENT .	II-11
GOVERNMENTAL CONSTRAINTS ON THE PRODUCTION OF HOUSING	II-13
NONGOVERNMENTAL CONSTRAINTS ON THE PRODUCTION OF HOUSING .	II-17
EFFECTS OF CONSTRAINTS ON TOTAL DEVELOPMENT COSTS	II-20
PUBLICLY-OWNED SURPLUS LAND	II-20
OPPORTUNITIES FOR ENERGY CONSERVATION	II-20
CURRENT AND PAST HOUSING PROGRAMS IN PATTERSON	II-21
FINDINGS	II-22
BIBLIOGRAPHY	II-24
GLOSSARY	II-25
CHAPTER III: POPULATION	III-1
INTRODUCTION	III-1
HISTORICAL POPULATION GROWTH	III-1
POPULATION CHARACTERISTICS	III-1
POPULATION PROJECTIONS	III-5
FINDINGS	III-8
BIBLIOGRAPHY	III-9
CHAPTER IV: ECONOMIC CONDITIONS AND FISCAL CONSIDERATIONS	IV-1
INTRODUCTION	IV-1
ECONOMIC CONDITIONS	IV-1

TABLE OF CONTENTS (Continued)

CHAPTER IV: ECONOMIC CONDITIONS AND FISCAL CONSIDERATIONS (Continued)

FISCAL SETTING	IV- 6
FINDINGS	IV-14
BIBLIOGRAPHY	IV-15
PERSONS CONSULTED	IV-16

CHAPTER V: TRANSPORTATION AND CIRCULATION

INTRODUCTION	V- 1
STREET AND ROADWAY SYSTEM	V- 1
PUBLIC TRANSIT	V-11
AIR SERVICE	V-11
RAIL SERVICE	V-12
FINDINGS	V-13
BIBLIOGRAPHY	V-14
GLOSSARY	V-16

CHAPTER VI: PUBLIC FACILITIES AND SERVICES

INTRODUCTION	VI- 1
GENERAL GOVERNMENT	VI- 1
WATER SERVICE	VI- 2
SEWAGE COLLECTION, TREATMENT, AND DISPOSAL	VI- 4
STORM DRAINAGE	VI- 4
LAW ENFORCEMENT	VI- 5
FIRE PROTECTION	VI- 7
SCHOOLS	VI- 7
MEDICAL SERVICES	VI-10
SOLID WASTE DISPOSAL	VI-12
LIBRARY	VI-12
MUSEUM	VI-12
GAS AND ELECTRICITY SERVICE	VI-13
TELEPHONE SERVICE	VI-13
FINDINGS	VI-14
BIBLIOGRAPHY	VI-15
PERSONS CONSULTED	VI-16
GLOSSARY	VI-17

CHAPTER VII: RECREATIONAL AND CULTURAL RESOURCES

INTRODUCTION	VII- 1
PARKS AND RECREATION	VII- 2
CULTURAL EVENTS	VII- 2
HISTORICAL AND ARCHAEOLOGICAL RESOURCES	VII- 3
HISTORIC SITES AND BUILDINGS	VII- 5
ARCHAEOLOGICAL RESOURCES	VII- 5

TABLE OF CONTENTS
(Continued)

HT 168
-P38
P81
1988
IGSL
UCB

CHAPTER VII: RECREATIONAL AND CULTURAL RESOURCES (Continued)

FINDINGS	VII- 7
BIBLIOGRAPHY	VII- 8
PERSONS CONSULTED	VII- 9

CHAPTER VIII: NATURAL RESOURCES VIII- 1

INTRODUCTION	VIII- 1
WATER RESOURCES	VIII- 1
AGRICULTURAL SOILS AND RESOURCES	VIII- 5
VEGETATION AND WILDLIFE RESOURCES	VIII- 9
AIR RESOURCES	VIII-17
MINERAL RESOURCES	VIII-22
FINDINGS	VIII-23
BIBLIOGRAPHY	VIII-24
PERSONS CONSULTED	VIII-26
GLOSSARY	VIII-27

CHAPTER IX: HEALTH AND SAFETY IX- 1

INTRODUCTION	IX- 1
SEISMIC AND GEOLOGIC HAZARDS	IX- 1
FLOODING HAZARDS	IX- 9
FIRE HAZARDS	IX-10
TOXIC/HAZARDOUS MATERIALS	IX-10
AIRCRAFT CRASH HAZARDS	IX-11
EMERGENCY RESPONSE	IX-11
NOISE	IX-11
FINDINGS	IX-18
BIBLIOGRAPHY	IX-19
PERSONS CONTACTED	IX-20
GLOSSARY	IX-21

CHAPTER X: SCENIC RESOURCES AND URBAN DESIGN X- 1

INTRODUCTION	X- 1
SETTING	X- 1
PLANNING AREA	X- 1
OVERALL URBAN PATTERN	X- 2
VISUAL RESOURCE/URBAN DESIGN DISTRICTS	X- 2
PRIMARY CIRCULATION ROUTES AND CITY ENTRIES	X- 8
FINDINGS	X- 9

THE NEW ENGLAND FISHING BOATS

CHAPTER I. THE FISHING BOATS OF NEW ENGLAND.

The fishing boats of New England are of various kinds, and are distinguished by the size of the vessel, the number of the crew, and the kind of fish which they catch. The most common of these boats are the dories, the gigs, and the schooners. The dories are small boats, usually of about twenty feet in length, and are used for catching small fish, such as mackerel, herring, and cod. The gigs are larger than the dories, and are used for catching larger fish, such as salmon, trout, and sea bass. The schooners are the largest of the fishing boats, and are used for catching large fish, such as whale, shark, and cod. The fishing boats of New England are all built of wood, and are painted in various colors. The dories are usually painted white, the gigs are painted red, and the schooners are painted black.

CHAPTER II. THE FISHING BOATS OF NEW ENGLAND.

The fishing boats of New England are of various kinds, and are distinguished by the size of the vessel, the number of the crew, and the kind of fish which they catch. The most common of these boats are the dories, the gigs, and the schooners. The dories are small boats, usually of about twenty feet in length, and are used for catching small fish, such as mackerel, herring, and cod. The gigs are larger than the dories, and are used for catching larger fish, such as salmon, trout, and sea bass. The schooners are the largest of the fishing boats, and are used for catching large fish, such as whale, shark, and cod. The fishing boats of New England are all built of wood, and are painted in various colors. The dories are usually painted white, the gigs are painted red, and the schooners are painted black.

CHAPTER III. THE FISHING BOATS OF NEW ENGLAND.

The fishing boats of New England are of various kinds, and are distinguished by the size of the vessel, the number of the crew, and the kind of fish which they catch. The most common of these boats are the dories, the gigs, and the schooners. The dories are small boats, usually of about twenty feet in length, and are used for catching small fish, such as mackerel, herring, and cod. The gigs are larger than the dories, and are used for catching larger fish, such as salmon, trout, and sea bass. The schooners are the largest of the fishing boats, and are used for catching large fish, such as whale, shark, and cod. The fishing boats of New England are all built of wood, and are painted in various colors. The dories are usually painted white, the gigs are painted red, and the schooners are painted black.

LIST OF FIGURES

		Follows <u>Page</u>
FIGURE I-1	REGIONAL LOCATOR MAP	I- 2
FIGURE I-2	CITY LIMITS AND PLANNING AREA BOUNDARIES	I- 2
FIGURE I-3	EXISTING GENERAL PLAN	I- 2
FIGURE I-4	ANNEXATION HISTORY	I- 6
FIGURE I-5	ZONING	I- 8
FIGURE I-6	EXISTING LAND USE	I-10
FIGURE I-7	VACANT AND AGRICULTURAL LAND	I-10
FIGURE I-8	CITY-OWNED LAND	I-10
FIGURE I-9	LAFCO SPHERE OF INFLUENCE	I-12
FIGURE I-10	AIRPORT LAND USE DESIGNATIONS	I-14
FIGURE II-1	HOUSING UNIT GROWTH RATES	II- 2
FIGURE II-2	HOUSING CONDITION TARGET AREAS	II- 6
FIGURE III-1	POPULATION GROWTH RATES	III- 2
FIGURE IV-1	BUDGET ALLOCATION BY FUND	IV- 6
FIGURE IV-2	GENERAL FUND REVENUE SOURCES	IV-10
FIGURE V-1	FUNCTIONAL ROADWAY CLASSIFICATIONS	V- 2
FIGURE V-2	STREET STANDARDS - MINOR STREET AND TWO-WAY COLLECTOR	V- 4
FIGURE V-3	STREET STANDARDS - MINOR COLLECTOR AND LAS PALMAS PARKWAY	V- 4
FIGURE V-4	STREET STANDARDS - INDUSTRIAL STREET AND FOUR-LANE MAJOR STREET	V- 4
FIGURE V-5	AVERAGE DAILY TRAFFIC COUNTS	V- 6
FIGURE VI-1	CITY ORGANIZATIONAL CHART	VI- 2
FIGURE VI-2	PUBLIC AND QUASI-PUBLIC FACILITIES	VI- 2

LIST OF FIGURES (Continued)

		Follows <u>Page</u>
FIGURE VI-3	WATER SERVICE FACILITIES	VI- 2
FIGURE VI-4	IRRIGATION DISTRICTS	VI- 4
FIGURE VI-5	SEWER COLLECTION SYSTEM	VI- 4
FIGURE VI-6	DRAINAGE FACILITIES AND WATERSHED AREAS	VI- 4
FIGURE VII-1	PARKS AND RECREATION FACILITIES	VII- 2
FIGURE VII-2	PATTERSON COLONY PLAT MAP - 1912	VII- 6
FIGURE VIII-1	WATER RESOURCES	VIII- 2
FIGURE VIII-2	PREDOMINANT AGRICULTURAL CROPS	VIII- 6
FIGURE VIII-3	SOILS MAP	VIII- 6
FIGURE VIII-4	LANDS UNDER WILLIAMSON ACT CONTRACT	VIII- 8
FIGURE VIII-5	HABITAT AREAS	VIII-10
FIGURE IX-1	FAULTS IN THE VICINITY OF PATTERSON	IX- 2
FIGURE IX-2	100-YEAR FLOODPLAIN	IX-10
FIGURE IX-3	FIRE HAZARD AREAS	IX-10
FIGURE IX-4	EXISTING 60 dB L_{dn} NOISE CONTOURS	IX-12
FIGURE IX-5	NOISE MONITORING SITES AND INDUSTRIAL AREAS	IX-16
FIGURE IX-6	LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS	IX-16
FIGURE IX-7	AMBIENT NOISE LEVELS	IX-16
FIGURE X-1	URBAN FORMS	X-3
FIGURE X-2	VISUAL RESOURCE/URBAN DESIGN DISTRICTS	X-4

INTRODUCTION

INTRODUCTION

This document contains background information compiled for the City of Patterson General Plan. The document addresses all the significant issues to be addressed in the Plan and will also serve as the "environmental setting" portion of the environmental impact report to be prepared on the General Plan.

This Background Report discusses every issue required to be addressed by state general plan law as well as issues of purely local importance. It is organized into ten chapters covering groups of related issues. It also includes three appendices. Appendix A contains the Community Concerns Summary Report, which synthesizes comments collected early in the General Plan preparation process from interviews with public officials, a townhall meeting in April 1988, and responses to a widely distributed survey form. Appendix B summarizes available federal, state, and local housing programs. Appendix C summarizes special state housing requirements.

The Background Report was prepared by a multi-disciplinary Consultant Team headed by J. Laurence Mintier & Associates. Jones & Stokes Associates were responsible for preparing Chapter IV, "Economic Conditions and Fiscal Considerations" and Chapter VIII, "Natural Resources." Joseph R. Holland was responsible for preparing the sections related to streets and traffic in Chapter V, "Transportation and Circulation." Brown-Buntin Associates was responsible for preparing the section of Chapter IX, "Health and Safety," concerning noise. Pepper Associates was responsible for preparing Chapter X, "Scenic Resources and Urban Design." Mintier & Associates prepared the balance of the report and was responsible for editing and compiling the document.

This Background Report is based upon information generally current to August 1988, although January 1988 will be used throughout the General Plan program as a baseline date for correlating land use and public facility data. The Background Report will be revised at the end of the General Plan program to reflect comments received on this draft and to incorporate new and updated information that becomes available.

The Consulting Team gratefully acknowledges the contributions of the City of Patterson staff in providing information and reviewing earlier drafts of this report.

LAND USE

INTRODUCTION

Land use is the primary focus of the general plan. The general plan sets a framework for the city's future development, including land use, transportation, and public services, and is a primary tool for the city's long-term planning and development.

OVERVIEW

The general plan is a long-term plan that sets the framework for the city's future development. It is a key tool for the city's long-term planning and development, and is used to guide the city's future development.

PLANNING AND PLANNING AREA

The planning area is the area that is covered by the general plan. It is the area that is covered by the city's long-term planning and development, and is used to guide the city's future development.

The planning area is the area that is covered by the general plan. It is the area that is covered by the city's long-term planning and development, and is used to guide the city's future development.

The planning area is the area that is covered by the general plan. It is the area that is covered by the city's long-term planning and development, and is used to guide the city's future development.

HISTORY OF LAND USE PLANNING IN PATTERSON

Early Development

The Patterson area was heavily settled in the early 1900s by Thomas W. Patterson. He was one of the first to settle in the area, and he was one of the first to develop the city into a major center for the region.

In 1910, Patterson received the first city of Stanislaus County, including the city of Patterson. The first planning commission was formed in 1912, and the first general plan was adopted in 1913. The city's first general plan was adopted in 1913.

CHAPTER I LAND USE

CHAPTER I

LAND USE

INTRODUCTION

Land use is the principal focus of the general plan. This chapter provides a context for the General Plan by describing existing land use conditions and local, regional, state, and federal plans and policies that have a bearing on land use in Patterson.

REGIONAL SETTING

Patterson occupies about one and a half square miles in western Stanislaus County, approximately 15 miles west of Modesto. The San Joaquin River lies three miles to the east and Interstate 5 runs about three miles to the west. Farther west lies the Diablo Mountain Range. Figure I-1 shows Patterson's general location.

CITY LIMITS AND PLANNING AREA

Patterson's city limits are defined on the west by Ward Avenue from Poppy Avenue to Sperry Avenue, Ninth Street from Sperry to the Patterson Water District canal, the Patterson Water District canal to Salado Creek, Salado Creek to Ward Avenue, and Ward Avenue to just south of its intersection with Highway 33. The city's southern limit is Poppy Avenue from Ward to Highway 33. Its eastern boundary forms a jagged edge from Walnut Avenue to Sperry Avenue. The city's northern city limits are defined the "V" formed by Highway 33 and Walnut Avenue.

For the purposes of the General Plan, the City of Patterson and the Consulting Team have defined a Planning Area as shown in Figure I-2. The Planning Area is defined by the San Joaquin River to the east, and an area west of Interstate 5 on the west. The northern boundary is Daniel Road west of Baldwin Road, Zacharias Road between Baldwin and Highway 33, and Eucalyptus Avenue east of Highway 33. The southern boundary of the Planning Area is Elfers Avenue west of Highway 33 and Almond Avenue east of Highway 33.

The Planning Area contains a total of about 12,000 acres, excluding streets and railroads, of which approximately 1,000 acres (8.3 percent) are incorporated and 11,000 acres (92.5 percent) are unincorporated. Figure I-2 shows the Planning Area boundary and city limits of Patterson.

HISTORY OF LAND USE PLANNING IN PATTERSON

Early Developments

The Patterson town and colony were originally laid out in 1909 by Thomas W. Patterson. Patterson laid out the city in its unique street pattern, and subdivided lots outside the city into five-, ten-, and twenty-acre plots.

In December 1919, Patterson became the third city in Stanislaus County, following Modesto and Turlock. The first Planning Commission was formed in 1949. A zoning ordinance and map were completed in 1955, and the city's street tree ordinance was established.

1959 General Plan

General planning in Patterson started as a joint project with Stanislaus County and its incorporated cities in 1957 with financing from the U.S. Housing and Home Finance Agency. The Program was assigned to the Cities-County Planning Advisory Committee, made up of representatives of the participating agencies. The committee was also responsible for the standardization of subdivision and zoning ordinances, a thoroughfare plan, and housing survey.

The Patterson Planning Commission and City Council adopted the General Plan in April 1959. By February 1961, general plans for the Modesto-Ceres-Empire Area, Newman, Oakdale, Riverbank, and Patterson has been completed and adopted by the Cities and County Planning Commissions. In 1961, the County Planning Commission completed and adopted a General Plan for all of Stanislaus County.

1973 General Plan

A comprehensive revision of the 1959 plan was completed in 1973. Preparation of the plan was financed in part by a grant from the California Department of Housing and Community Development. The plan was prepared by the Stanislaus Area Association of Governments (SAAG). As part of the plan, a number of countywide Environmental Resource Management Elements (ERME) prepared by SAAG were adopted. ERME sections included: soils, water, geology and seismic safety, agriculture, recreation/open space, and wildlife and vegetation.

1978 General Plan

After the adoption of the 1973 General Plan, a number of state laws concerning general plans and zoning were passed. The formation of policy on future growth and concern over general plan and zoning consistency prompted a general plan study and revision. The 1978 plan contained the nine mandatory elements: land use, housing, circulation, conservation, open space, noise, safety, seismic safety, and scenic highways. (Since then, state law has consolidated safety and seismic safety into one required element and the scenic highways element has been deleted.)

Issues addressed in the 1978 General Plan included expansion of the City's sewer treatment plant and the City's purchase of the water company. Land outside the city limits within the General Plan area was designated as Residential Reserve, Commercial Reserve, and Industrial Reserve. The 1978 General Plan land use diagram and policies is the existing General Plan guiding the city until adoption of the revised General Plan scheduled for July 1989.

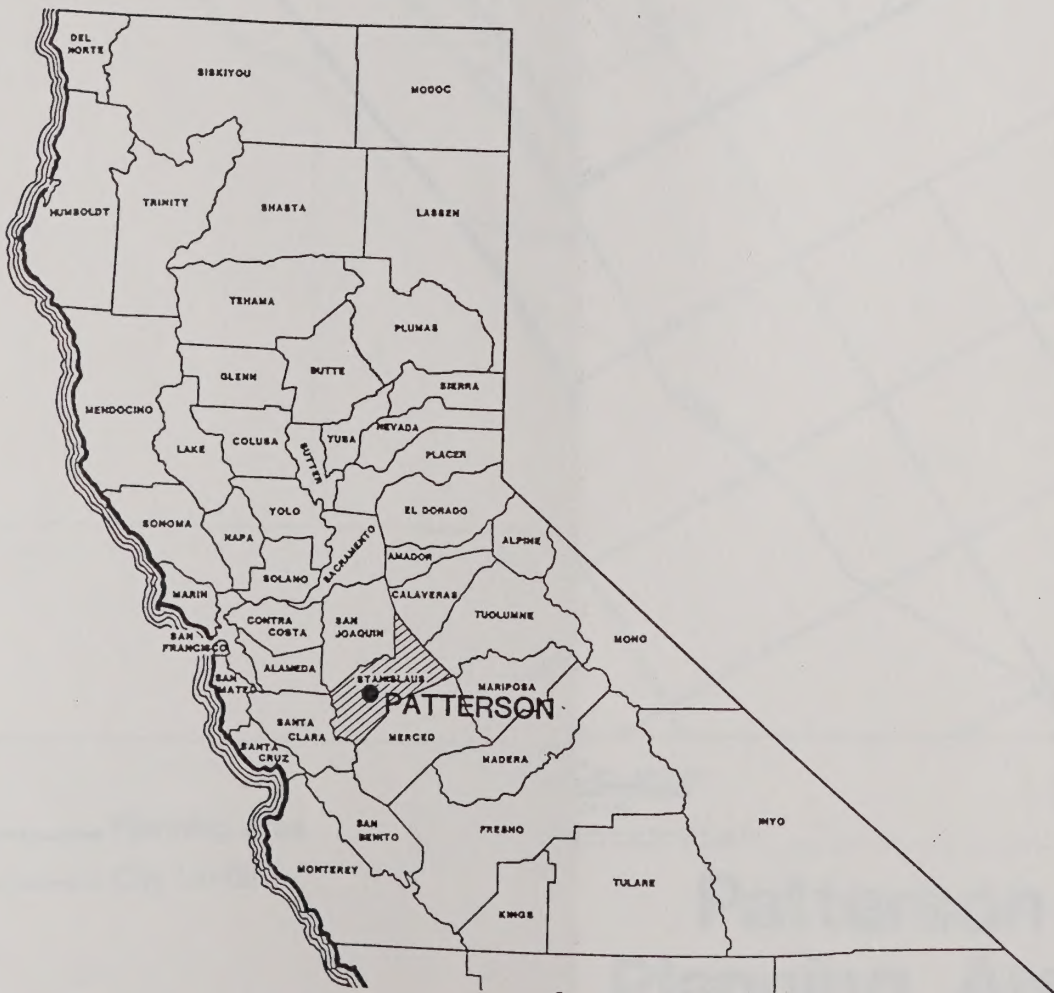
The 1978 General Plan has a number of deficiencies. First, it is over ten years old, and does not reflect the growth and changes that have taken place in the city. Secondly, the policy language is overly general, and contains little direction for implementation. In addition, the plan does not define density provisions for land use designations, and it does not reflect the City's Master Sewer, Water, and Drainage Master Plans, or the airport land use plans.

The existing general plan land use designations are shown in Figure I-3.

1984-85 General Plan Revision Preliminary EIR

In 1984, the City of Patterson initiated a revision of its 1978 General Plan. The City began by preparing a preliminary Environmental Impact Report on potential land uses under a revised

Figure I-1
REGIONAL LOCATOR MAP



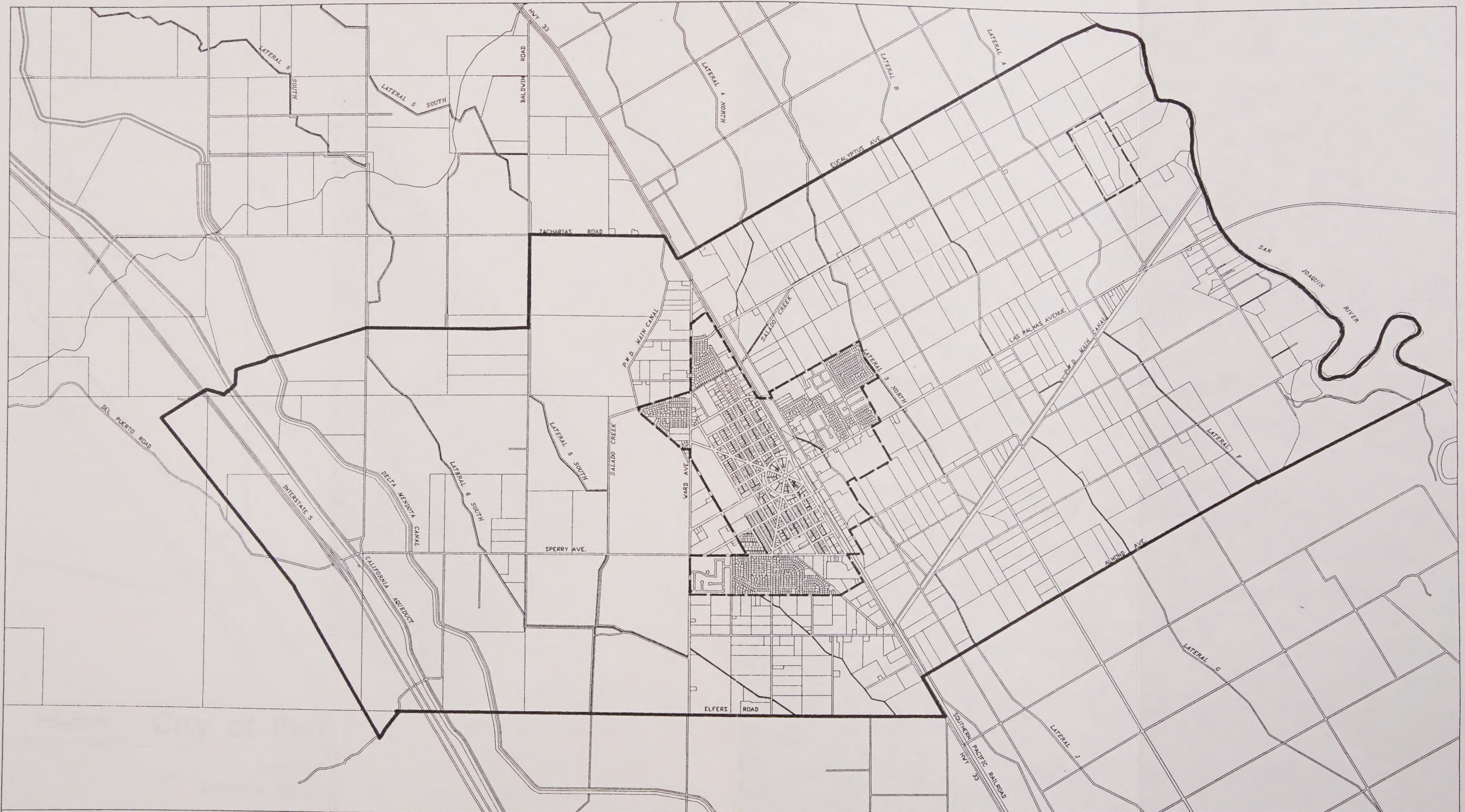
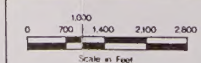


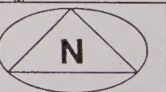
Figure I-2
CITY LIMITS AND PLANNING AREA BOUNDARIES

—— Planning Area
----- City Limits

Sources: City of Patterson and J. Laurence Mintier & Associates, 1988.

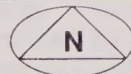


Base Map prepared by Lew Garcia Davis July 1988



Patterson Planning Area

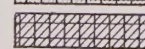
City of Patterson



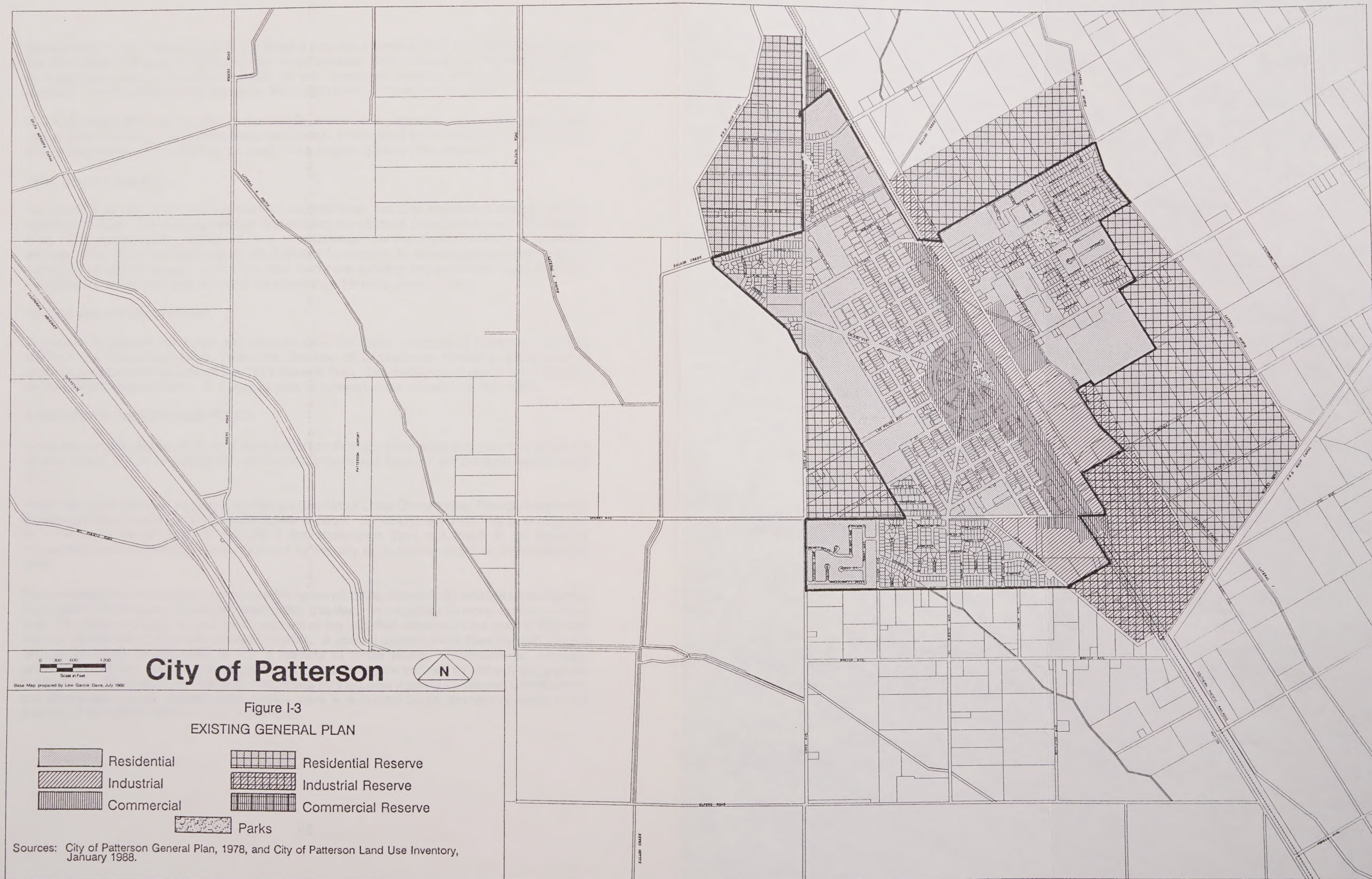
0 300 600 1200
Scale in Feet

Base Map prepared by Lew Garcia Davis, July 1986

Figure I-3
EXISTING GENERAL PLAN

	Residential		Residential Reserve
	Industrial		Industrial Reserve
	Commercial		Commercial Reserve
	Parks		

Sources: City of Patterson General Plan, 1978, and City of Patterson Land Use Inventory, January 1988.



General Plan. The Preliminary EIR evaluated a proposed General Plan area extending beyond the 1978 General Plan area south to Elfers Road between Ward Avenue and Highway 33, north to Eucalyptus Avenue between Highway 33 and Sycamore Avenue, and east to Sycamore Avenue. The Preliminary EIR outlined a thorough revision of the General Plan.

The Preliminary EIR was adopted by the City Council in 1985, however, no general plan or land use diagram or policy development was completed. Information and comments included in the Preliminary General Plan EIR will be used in the current general plan revision.

1985 Housing Element

Responding to new state housing element requirements, the City adopted a revised housing element in 1985. The housing element superceded the element contained in the 1978 General Plan. It contains goals, objectives, and recommendations for implementation of specified actions. The recommended actions are intended to respond to anticipated housing needs of Patterson residents through 1992. The plan discusses existing and projected housing needs, including available land and potential constraints on housing development.

1988-89 General Plan Revision

Prompted by growth pressures and concern over the future direction of Patterson, the City retained the Consultant Team under the direction of J. Laurence Mintier & Associates to undertake a complete revision of the City's General Plan. This background report is the first part of the general plan revision. The revised plan is scheduled for adoption in July 1989.

ANNEXATION HISTORY AND POLICY

Since its incorporation in 1919, the City of Patterson through annexation has grown to about 1.6 square miles. Figure I-4 depicts this annexation growth and Table I-1 list the annexations since 1960.

Annexations to cities are regulated by the Cortese-Knox Local Government Reorganization Act (California Government Code Sections 56000 et seq.). Generally, any land that is contiguous to a city may be annexed to the city if the annexation does not result in an island of unincorporated land completely surrounded by the city or in narrow strips of unincorporated land.

Proponents of an annexation must secure the approval of the affected city and the Local Agency Formation Commission (discussed later in this chapter). In inhabited territory--territory with at least 12 voters--a petition signed by 25 percent of the qualified electors in the area is filed with the city council which then calls a public hearing. A special election must then be held and the annexation must be approved by the a majority of those voting. Proposals for annexing uninhabited territory--territory with fewer than 12 voters--may be initiated by either the city or the landowners. No election is held and, if approved by the Local Agency Formation Commission, the annexation occurs automatically, unless there is a protest by 50 percent or more of the owners of land and improvements in the area.

TABLE I-1

ANNEXATION HISTORY

Map No.	Designation	Effective Date
1.	Sacred Heart School Addition	8/22/61
2.	Masonic Temple Tract Addition	5/24/62
3.	Corriea Tract Addition	4/11/61
4.	East Colony Tract No. 2	4/26/56
5.	Ielmini Tract No. 1	5/20/59
6.	Patterson Frozen Food Addition	12/21/62
7.	Northmead Addition	1/22/20
8.	Salado Addition	8/64
9.	Star Craft	10/21/63
10.	Enterprise Addition	12/14/67
11.	Del Puerto Estates	5/21/69
12.	Buehner Addition	6/12/69
13.	Cozzitorto Addition	10/27/69
14.	Las Palmas Estates Addition	10/27/70
15.	Keystone Terrace Addition	12/14/70
16.	Kaiser Addition	12/19/71
17.	West Northmead Addition	12/17/71
18.	Azevedo Addition	2/03/72
19.	Cochran Manor No. 1	3/21/72
20.	Bingham Addition	6/06/72
21.	Enterprise No. 2 Addition	10/03/72
22.	"M" Street Addition	4/73
23.	Lehman Addition	6/06/72
24.	Thompson Addition	N/A
25.	Lilac Avenue Addition	8/22/74
26.	Hillview Addition	N/A
27.	First and Las Palmas Addition	7/06/76
28.	First and Orange Addition	8/07/76
29.	Johnson Annexation	12/07/76
30.	Jensen Addition	7/05/77
31.	Map of Patterson Colony - Subtract No.1	1/02/79
32.	Lot 1041 "Map of Lots 402 and 403 of Patterson Colony Subtract No.2	6/12/79
33.	Traaina Annexation	5/06/80

Continued on next page.

TABLE I-1 (Continued)

ANNEXATION HISTORY

<u>Map No.</u>	<u>Designation</u>	<u>Effective Date</u>
34.	East Colony Tract	7/26/56
35.	Reseigh No. 2 Annexation, Res. No. 80-155	10/21/80
36.	Humbert Annexation	12/12/80
37.	Eastside No. 1 Annexation	12/15/80
38.	West Side No. 1	10/15/80
39.	Eastside No. 2	9/23/80
40.	Southside No. 2	7/10/86
41.	Southside	7/10/86
42.	Patterson Ranch	7/18/86

Source: Stanislaus County Planning Department, 1988.

ZONING

Under state law, cities and counties have broad latitude in establishing zoning standards and procedures. Outside of a general requirement for open space zoning and several special requirements governing residential zoning, state law establishes only broadly the scope of zoning regulation and sets minimum standards for its adoption and administration. One key requirement, however, is that zoning be consistent with the general plan.

Patterson's zoning ordinance, originally adopted in 1955, has been amended many times over the years. Most recently, in July 1988, the City Council approved the addition of a new zoning district. The Light Industrial (LM) district was added to provide development standards for industrial development adjacent to residential uses.

R-A Residential Agricultural

The purpose of the Residential Agricultural zone is to stabilize and protect the rural residential characteristics of the area to which it is applied. The R-A zone is intended for rural family homes with limited agricultural uses.

The minimum lot area in the R-A zone is 7,000 square feet for corner lots and 6,000 square feet for interior lots with minimum lot widths of 70 feet for corner lots and 60 feet for interior. A maximum of 40 percent of the site is permitted for aggregate building coverage. Front yards must be at least 25 feet and at most 35 feet. Rear yards must be at least 20 feet. Side yards must be at least 10 feet on the street side and 5 feet on respective sides of interior lots. No main building may exceed 35 feet in height and no accessory structure may exceed 15 feet. Accessory buildings used for the keeping of poultry or animals must be at least 60 feet from the front property line.

R-1 Single Family Residential

The Single Family Residential zone is intended to provide for single-family homes, together with schools, parks, open space, and other public services.

The minimum lot area in the R-1 zone is 7,000 square feet for corner lots and 6,000 square feet for interior lots with minimum lot widths of 70 feet for corner lots, 60 feet for interior lots, and 40 feet for cul-de-sac lots, and a minimum lot depth of 100 feet. Front and rear yards must be at least 20 feet, and side yards must be at least 10 feet on the street side and 5 feet on respective sides of interior lots. No main building may exceed 35 feet in height and no accessory structure may exceed 20 feet. Off-street parking must be provided.

R-2 Two Family Residential

The R-2 zone is intended to allow for two family homes and for the compatible mingling of single-family dwellings and duplexes. Lot and yard, height, and architectural review requirements are identical to those of the R-1 zone. Off-street parking must be provided.

R-3 Medium Density Multiple-Family Residential

The Medium Density Multiple-Family Residential zone allows for multiple-family dwellings or apartment houses and duplexes.

The minimum lot area in the R-3 zone is 7,000 square feet for corner lots and 6,000 square feet for interior lots with minimum lot widths of 70 feet for corner lots, 60 feet for interior lots, and 40 feet for cul-de-sac lots, and a minimum lot depth of 100 feet. The minimum lot area per dwelling unit is 2,178 square feet, equivalent to 20 units per acre. Front yards must be at least 20 feet, rear yards must be at least 5 feet, and side yards must be at least 10 feet on the street side and 5 feet on respective sides of interior lots, provided that the minimum space between dwellings on adjacent parcels is 12 feet. There must be at least 10 feet between dwelling units on the same lot and 10 feet between dwellings and accessory buildings. No main building may exceed 35 feet in height and no accessory structure may exceed 20 feet. Site plans must be approved by an architectural review committee. Off-street parking must be provided.

C-1 Neighborhood Commercial

The Neighborhood Commercial zone is intended to provide for centers for convenient shopping and services in residential neighborhoods. The C-1 zone provides for commercial uses when conducted within a building, and for two-family dwellings, multiple-family dwellings, professional offices, churches, libraries, other public and quasi-public facilities, and rooming and boarding houses.

The minimum lot area in the C-1 zone is 5,000 square feet. Front yards must be at least 15 feet, except when abutting a residential zone, in which case the minimum front yard is 20 feet. Rear yards must be at least 10 feet. There is no minimum side yard, except when lots abut a residential zone, in which cases the side yard must be at least that required in the abutting zone. There must be at least 20 feet between dwelling units on the same lot, 10 feet between dwellings and accessory buildings. No main building may exceed 35 feet in height. Off-street parking must be provided.



City of Patterson

Figure I-4
ANNEXATION HISTORY

Map numbers refer to Table I-1

Source: Stanislaus County Planning Department, 1988.

C-2 Central Commercial

The C-2 zone allows for retail stores and personal service establishments.

The minimum lot area in the C-2 zone is 2,000 square feet. There are no minimum front and rear yard requirements, except when abutting a residential zone, in which case the minimum front and rear yard is the same as that required in the abutting zone. Rear yards abutting on alleys must be at least 10 feet. There is no minimum side yard, except when lots abut a residential zone, in which cases the side yard must be at least 5 feet. No building or structure may exceed 50 feet in height.

C-3 Heavy Commercial

The Heavy Commercial zone allows for all uses permitted in C-2 zone, and for wholesale and storage within buildings and secondhand sales.

The minimum lot area in the C-3 zone is 2,000 square feet. There are no minimum yard requirements except when abutting a residential zone, in which case the minimum front yard requirement must be at that required in the abutting zone, and side and rear yards must be at least 5 feet. Rear yards abutting an alley must be at least 10 feet. No building or structure may exceed 50 feet in height.

LM Light Industrial

The Light Industrial zone allows for retail and wholesale stores and storage, service establishments, other light industrial uses.

There are no minimum lot area requirements in the LM zone. Front yards and side yards of corner lots must be at least 15 feet. There are no minimum side and rear yard requirements except when abutting a residential zone, in which case the minimum side yards must be at least 5 feet and rear yards must be 10 feet. If the LM zone is separated from a residential zone by a street, alley, canal, or other public right-of-way, no rear yard is required. No building or structure may exceed 35 feet in height. Off-street parking must be provided.

M Industrial

The Industrial zone provides areas for operation of industries, including retail and wholesale store or storage, service establishments, light industrial, and manufacturing uses.

There are no minimum lot or yard requirements in the M zone. No building or structure may exceed 50 feet in height.

PD Planned Development

The PD is a combining zone intended for parcels which are suitable for proposed developments and for which detailed development plans have been submitted and approved and/or for which detailed written development plans and/or regulations are approved.

Figure I-5 shows the current zoning for Patterson and Table I-2 shows the distribution of Patterson land among zoning categories. It should be noted that the acreage total in Table I-

2 excludes land covered by highways and roads which run through the city. The total therefore falls short of the total acreage total by about 180 acres. A comparison of the City's zoning map with the General Plan map reveals that there are no significant inconsistencies between them.

As Table I-2 indicates, over 75 percent of the land in the city is zoned for some kind of residential use, with about two-thirds of this land set aside exclusively for single-family dwellings. Industrial zoning occupies about 13 percent of the city's land. The bulk of this land is located east of Second Street, and south of Sperry east of the Patterson Water District main canal. Commercial zoning makes up about 8 percent of the city's land. Commercial zoning is concentrated in the downtown circle and in a strip on the west side of Second Street/Highway 33.

Two of the City's zoning designations are not applied to any land within the city: R-A (Residential Agricultural) and C-1 (Neighborhood Commercial).

TABLE I-2
ACREAGE BY ZONING CATEGORY
City of Patterson
1988

<u>Zoning Category</u>	<u>Acreage</u>	<u>% of Total</u>
R-A	0.0	0.0
R-1	481.8	64.8
R-2	16.2	2.2
R-3	83.3	11.2
C-1	0.0	0.0
C-2	31.8	4.3
C-3	25.5	3.4
LM	17.3	2.3
M	80.0	10.8
PD	<u>7.6</u>	<u>1.0</u>
Total	743.5	100.0

Source: City of Patterson Land Use Inventory, January 1988.

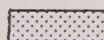
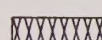
EXISTING LAND USE

Based on conditions as of January 1988, the City of Patterson conducted an inventory of existing land uses within the Planning Area. The results of the survey are summarized in Table I-3 and the generalized land uses as identified by the survey are shown in Figure I-6.



City of Patterson

Figure I-5
ZONING

- | | | |
|---|---|--|
|  R-1 |  PD |  M |
|  R-2 |  C-2 |  LM |
|  R-3 |  C-3 | |

Source: City of Patterson Zone Map

TABLE I-3
NET ACREAGE BY GENERALIZED LAND USE CATEGORY
January 1988

<u>Land Use Category</u>	<u>Net Acreage</u>	<u>% of Planning Area</u>	<u>% of Non-Ag Land</u>
AGRICULTURAL	10,108.4	91.6	
NON-AGRICULTURAL			
Residential			
Single-Family	327.7		35.0
Multi-Family, 2 to 4 Units	3.4		0.4
Multi-Family, 5 or More Units	20.6		2.2
Mobilehomes	21.5		2.3
Public Housing	14.6		1.5
Residential care facility	0.9		0.1
Total Residential	388.7		41.5
Commercial			
Motel/Hotel	0.3		—
Retail Commercial	33.9		3.6
Restaurants and Bars	2.2		0.2
Offices/Financial Institutions	4.8		0.5
Personal Service Commercial	5.7		0.6
Mixed Commercial	0.9		0.1
Total Commercial	47.4		5.1
Industrial	93.0		9.9
Institutional			
Public Institutional (Excluding public housing)	186.2		19.9
Private Institutional	54.6		5.8
Total Institutional	240.8		25.7
Vacant	166.7		17.8
TOTAL NON-AGRICULTURAL	936.6	8.5	100.0
TOTAL PLANNING AREA	11,045.0	100.0	100.0

Source: City of Patterson Land Use Inventory, January 1988.

Table I-3 reveals that the mix of uses as identified in the land use survey is similar to the distribution of zoning designations shown in Table I-2. As indicated in Table I-3, the Planning Area is composed primarily of agricultural uses outside the city limits. While the percentage of land attributed to residential uses (41 percent) is lower than the amount zoned for residential uses, public and private institutional uses (e.g. schools, churches, hospital) are located primarily on residentially-zoned land and a significant portion of land listed as vacant are residential subdivisions approved but not constructed as of January 1988.

Future growth in the city is dependent on the development of vacant lands within the city, and expansion and conversion of agricultural lands. Figure I-7 shows vacant and agricultural lands as of January 1988.

The City of Patterson owns land used for various purposes, including its sewage treatment plant, parks, police and fire department building, and other uses. A total of 128.8 acres are owned by the City. A large portion of this acreage (about 80 acres) is non-contiguous land located east of the city, near the San Joaquin River, which accommodates the City's sewage treatment plant and evaporation ponds. City-owned land is shown in Figure I-8.

LOCAL AGENCY FORMATION COMMISSION (LAFCO) AND SPHERE OF INFLUENCE (SOI)

In 1985, the various state laws regulating city and special district organization and annexations were consolidated in the Cortese/Knox Local Government Reorganization Act (Government Code Section 56000 et seq.).

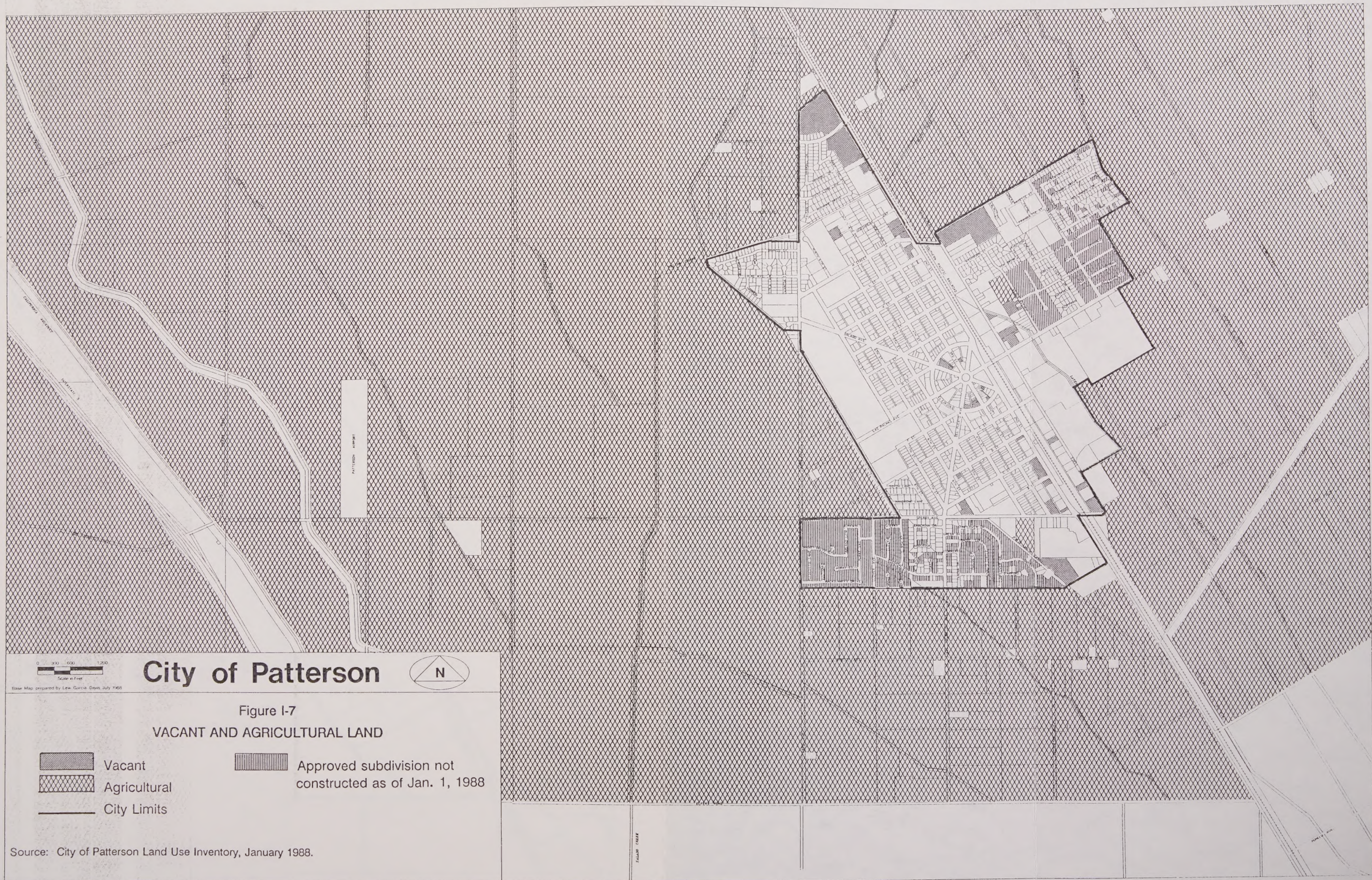
The 1963 Knox-Nisbet Act, which was superseded by Cortese/Knox, created local agency formation commissions (LAFCOs) in each county in California to regulate the organization and extension of services provided by cities and special districts. The Act declares that "among the purposes of the commission are the discouragement of urban sprawl and encouragement of the orderly formation and development of local agencies based upon local conditions and circumstances. One of the objects of the commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local agencies in each county development of local agencies so as to advantageously provide for the present and future needs of each county and its communities" (Government Code Section 56301). In meeting these responsibilities, each LAFCO is required "to review and approve or disapprove, with or without amendments, wholly, partially, or conditionally, proposals for changes of organization or reorganization" (Government Code Section 56475 (a)).

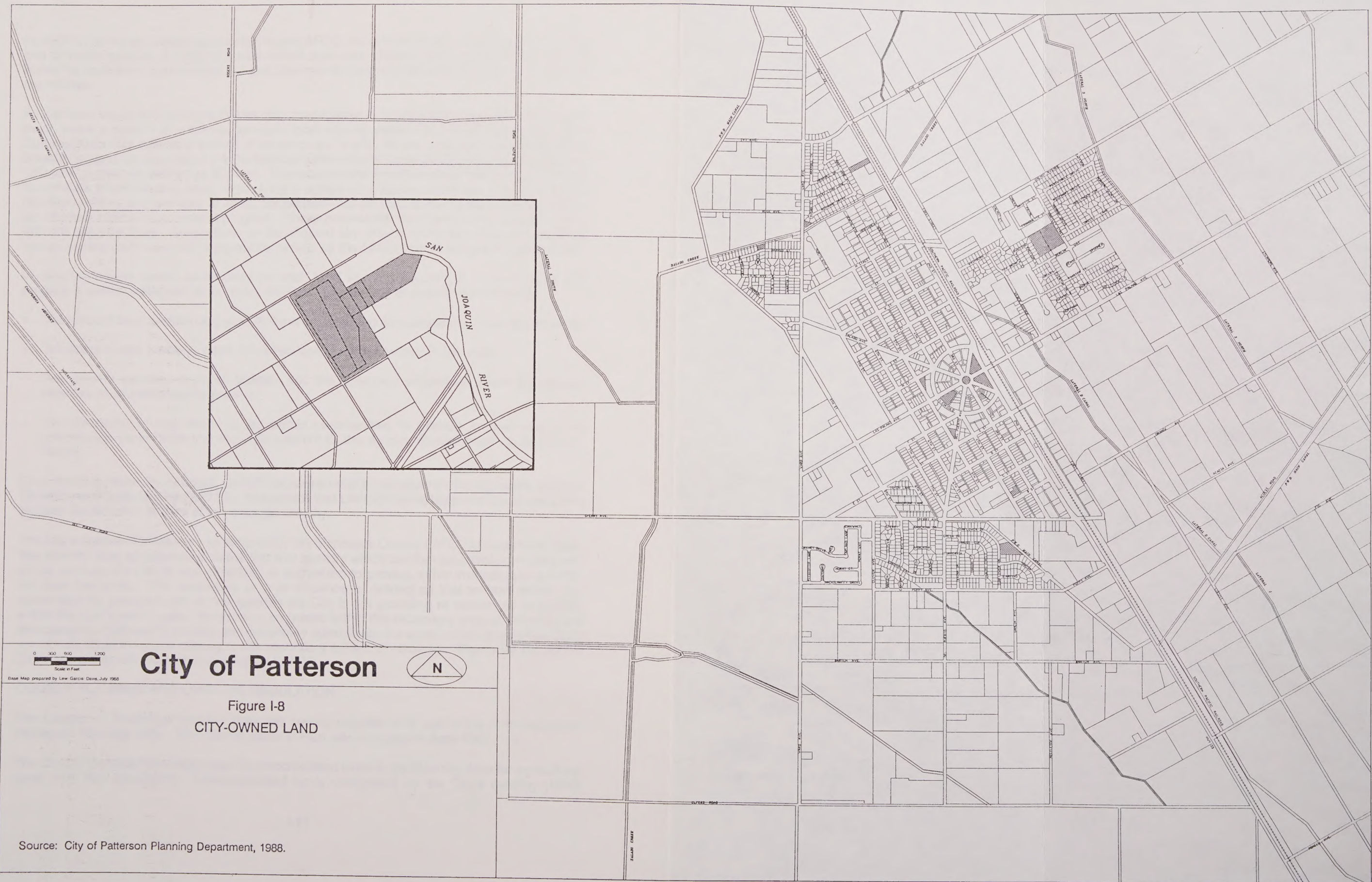
According to Section 56201 of the Government Code, "change of organization" means any of the following:

- A city incorporation
- A district formation
- An annexation to, or detachment from, a city or district
- A disincorporation of a city
- A district dissolution
- A consolidation of cities or special districts

The special districts that fall under LAFCO jurisdiction are defined in Government Code Section 56036. School districts and redevelopment agencies, among others, are not included within this definition and are, therefore, not subject to LAFCO review.







City of Patterson

Figure I-8
CITY-OWNED LAND

Source: City of Patterson Planning Department, 1988.

In addition to the regulatory responsibilities of LAFCO, the commission is empowered to initiate and to make studies of existing governmental agencies. These studies include, but are not limited to, inventorying local agencies and determining their maximum service areas and service capabilities.

As the basis in part for making decisions about organizational changes and annexations, LAFCO must adopt a sphere of influence for each local agency subject to LAFCO regulation. The Cortese/Knox Act defines a sphere of influence as "a plan for the probable ultimate physical boundaries and service area of a local agency" (Government Code Section 56076). In practice, "ultimate" is typically defined as 20 years. This includes the identification of "Urban Service Area" boundaries which identify areas within a city's sphere of influence which are served by urban facilities, utilities, and services or which are proposed to be served during the first five years of an adopted capital improvement program. These boundaries shall be adopted in cooperation with the affected cities. Annexations by the affected city of land which falls within an identified 'urban service area boundary' may not be denied by the LAFCO which adopts the boundaries.

In determining the sphere of influence for each local agency, the LAFCO must consider and prepare a written statement of its determinations with respect to each of the following:

- The present and planned land uses in the area, including agricultural and open space lands.
- The present and probable need for public facilities and services in the area.
- The present capacity of public facilities and the adequacy of services which the agency provides or is authorized to provide.
- The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency (Government Code Section 56425).

Once these spheres are adopted, LAFCO decisions must be consistent with applicable spheres (Government Code Section 56377.5). This means that LAFCO may not approve city annexations outside the adopted sphere of influence for the city.

The City's sphere of influence was adopted by the Stanislaus County LAFCO in December 1984. The primary area of influence is defined as that territory which can be reasonably provided with all the services the City is now providing, or authorized to provide, either immediately or within the next ten years. The secondary area of influence is defined as that territory which can reasonably be provided with all the services the City is not providing or authorized to provide within the next twenty years. Annexation proposals within the secondary area of influence are discouraged. Patterson's primary and secondary spheres are the same; which means that there are not annexation issues relating to the secondary sphere of influence. Figure I-9 shows the City's sphere of influence as approved by LAFCO.

COUNTY PLANNING AND LAND USE REGULATION

The County of Stanislaus General Plan and zoning regulate land use in the unincorporated Patterson Planning Area. The County General Plan was adopted in June 1987.

The County General Plan designates all unincorporated lands in the Planning Area for agricultural uses, with two exceptions. Unincorporated lands designated by the City's existing (1978)

General Plan are designated as Urban Transition. An small area east of the Interstate 5 offramp, straddling Sperry Road to the north and south between the California Aqueduct and the Delta-Mendota canal is designated for Highway Commercial. A description of these land use categories and applicable County zoning follows.

- The County General Plan *Agricultural* designation establishes agriculture as the primary use, but allows for low density dwelling units, limited industrial uses, and other uses which by their unique nature are not compatible with urban uses, provided they do not conflict with the primary use. The agricultural designation is also consistent with areas the County General Plan has identified as suitable for open space or recreational use and for ranchettes.

Exclusive Agriculture (A-2) zoning is found in this designation. Planned Development (PD) may also be permitted provided the development does not exceed the established building intensity of the agricultural designation. Residential building intensity ranges for 0 to 2 dwellings per 40 acres in the A-2-40 zone and up to 1 dwelling per 3 acres in A-2-3. Other zoning subcategories are A-2-5, A-2-10, A-2-20, and A-2-160, with associated building intensities.

- The *Urban Transition* designation is intended to ensure that land remains in agricultural usage until urban development consistent with a city's general plan designation is approved. Generally, urban development will only occur upon annexation to a city. Development may be permitted prior to annexation provided the development is not inconsistent with the land use designation of the general plan of the affected city.

Until Urban Transition lands within a sphere of influence are annexed, they are zoned Exclusive Agriculture (A-2). Planned Development (PD) zoning may also be appropriate provided the development does not exceed the established building intensity for this designation. Building intensity and population density are the same as under the Agricultural designation.

- The *Highway Commercial Planned Development* is designated for land located at freeway interchanges where it may be necessary to provide services to highway travelers. Land within this designation is zoned for Exclusive Agriculture (A-2) until rezoned to Planned Development (PD). Population density and building intensity will be determined on a case-by-case basis.

Primary uses within the Highway Commercial Planned Development designation are:

- Truck stops
- Restaurants
- Motels
- Service stations
- Overnight R.V. camping
- Fruit stands

The following uses may be permitted only when accessory to the uses listed above:

- Towing service
- Minor emergency automobile repair
- Convenience market
- Wine tasting

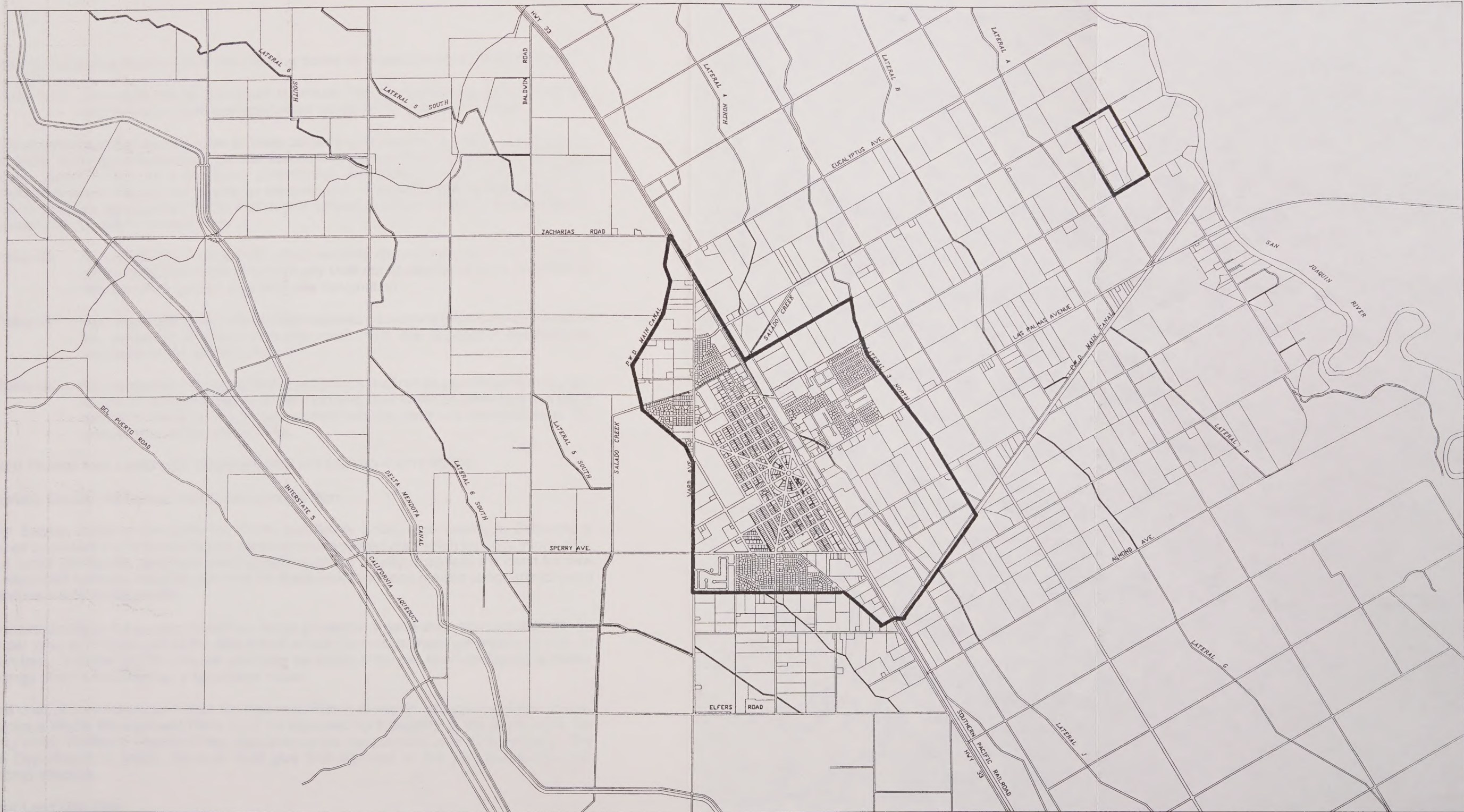
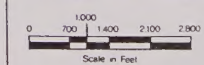
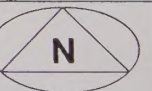


Figure I-9
LAFCO SPHERE OF INFLUENCE



Base Map prepared by Lew Garcia Davis July 1988



Patterson Planning Area

Source: Stanislaus County Local Agency Formation Commission, December 1984.

The County's General Plan contains the following policy for protection of agricultural lands:

- Policy 14. Uses shall not be permitted to intrude into an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.

The County General Plan also contains policies concerning development within a city's sphere of influence. Although these policies provide for consistency with Patterson's General Plan, the County's current policy of encouraging commercial and industrial development creates competition between the city and county for development. Policies 24 and 25 below allow the county to approve development within Patterson's sphere of influence if the development is consistent with the City's General Plan.

- Policy 24. Non-residential development which requires discretionary approval of and is within the sphere of influence of a city shall not be approved if it is inconsistent with the city's general plan land use designation.
- Policy 25. Non-residential development which requires discretionary approval and is within the sphere of influence of a city must meet the applicable development standards of the affected city.
- Policy 26. Rezoning of land for residential development shall not be permitted within a city's sphere of influence prior to annexation and shall never be permitted in a city's sphere of influence if it is inconsistent with the land use designation of the general plan of the affected city.

OTHER PLANS AND LAND USE REGULATIONS AFFECTING PATTERSON

Stanislaus County Hazardous Waste Management Plan

Under Section 25135 of the California Health and Safety Code, each county in California is required to prepare a countywide hazardous waste management plan which includes information about waste generation, describes existing facilities in the county, assesses the need for new and expanded facilities, analyzes potential for waste reduction, and creates programs for local hazardous waste management.

Stanislaus County is not a major hazardous waste generator; it generates approximately 12,100 tons per year, or 0.12 percent of the state's total annual hazardous waste generation of over 10 million tons. Another 52,000 tons per year may be added if the ash from the County's waste-to-energy plant is classified as a hazardous waste.

A final draft of the Hazardous Waste Management Plan is presently undergoing public review. Hazardous Waste Management Plans must be approved by a majority of the cities within the county which contain a majority of the population in the incorporated area of the county. The State Department of Health Services must give final approval to the plan before the plan becomes effective.

Airport Land Use Plan

Under various provisions of state law, cities and counties are required to either bring their general plans and any specific plans into compliance with the adopted County Airport Land Use Commission (ALUC) plan for the territory around designated airports or to make specified

findings. The purpose of the airport land use plan and the consistency requirement is to eliminate or minimize development around airports that would be subject to significant levels of aircraft noise or would pose a safety hazard to aircraft or occupants of the development in the event of a plane crash.

In 1978, the Stanislaus County ALUC adopted an Airport Land Use Commission Plan for five airports under its jurisdiction. As part of the plan, the ALUC established planning area boundaries around each airport and developed land use plans within these boundaries, including recommending compatible land uses and recommending height restrictions and building standards for soundproofing within the planning boundaries. Portions of two airport planning boundaries fall within the Patterson Planning Area: Patterson Airport and Crows Landing Naval Auxiliary Landing Field.

The ALUC plan divides the airport planning regions into four areas: 1) airport building area; 2) other airport property; 3) approach and transitional surfaces; and 4) other lands within the airport planning boundary. Figure I-10 shows the ALUC planning boundaries within the Planning Area for Patterson Airport and Crows Landing Naval Auxiliary Landing Field. Table I-4 lists the compatible, prohibited, and conditionally approvable uses for each area within the airport planning boundaries, as defined by the ALUC plan.

In August of 1983, the ALUC evaluated City and County general plan designations and zoning for consistency with the airport land use plans. The ALUC deemed the Patterson General Plan and zoning and the Stanislaus County General Plan and zoning to be compatible with the airport land use plans for Patterson Airport and Crows Landing Naval Auxiliary Landing Field. All lands under County jurisdiction surrounding Patterson Airport are subject to a height limiting ordinance. There is no adopted height limiting ordinance surrounding the Crows Landing Naval Auxiliary Landing Field. By Fall of 1988, Crows Landing will have completed revised noise contours and flight paths for submission to the County.

Del Puerto Hospital Master Plan

The Del Puerto Hospital District is a special district which operates Del Puerto Hospital in Patterson. The Hospital District, formed in 1947, takes in the entire Planning Area. In 1985, the Hospital District commissioned consultants to prepare a Master Plan for the hospital. The *20-Year Development Plan for Del Puerto Hospital* was adopted November 1, 1986. The plan is intended to provide for orderly site development as the hospital expands, based on assumptions of future population growth within the Hospital District from 1985 to 2005. Specific hospital expansion plans and issues are discussed in Chapter VI, "Public Facilities and Services."

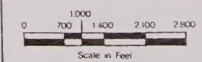


Figure I-10
AIRPORT LAND USE DESIGNATIONS

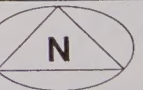
— Patterson Airport

▬ Crows Landing Naval Auxiliary Landing Field

(See Table 1-4 for permitted uses)



Base Map prepared by Lew Garcia Davis July 1988



**Patterson
Planning Area**

TABLE I-4

AIRPORT LAND USE COMPATIBILITY LISTING

Uses	AREA ¹			
	1	2	3	4
Agricultural uses				
Truck and specialty crops	O	O	O	O
Field crops	O	O	O	O
Pasture and rangeland	O	O	O	O
Orchard and vineyards	X	X	O	O
Dry farm and grain	O	O	O	O
Tree farms, landscape nurseries, and greenhouses	O	O	C	O
Fish farms	X	X	O	O
Feed lots and stockyards	X	X	C	O
Poultry farms	X	X	C	O
Dairy farms	X	X	C	O
Natural uses				
Fish and game reserves	X	X	O	O
Land reserves and open space	O	O	O	O
Flood and geologic hazard areas	O	O	O	O
Waterways	O	O	O	O
Residential and Institutional				
Rural residential (10-acre lots or more)	X	X	C	O
Suburban residential (20,000 sf to 10 acre lots)	X	X	X	O
Urban single family (under 20,000 sf lots)	X	X	X	O
Multi-family	X	X	X	O
Mobilehome parks	X	X	X	O
Hospitals	C	C	X	O
Churches	X	X	X	O

¹Area 1 - Airport Building Area

Area 2 - Other Airport Property

Area 3 - Approach and Transitional Surfaces

Area 4 - Other Lands Within Airport Planning Boundary

O = COMPATIBLE

X = PROHIBITED

C = CONDITIONALLY APPROVABLE

Continued on next page.

TABLE I-4 (Continued)

AIRPORT LAND USE COMPATIBILITY LISTING

Uses	AREA			
	1	2	3	4
Recreational				
Golf course	O	O	O	O
Parks	O	O	O	O
Playgrounds and picnic areas	O	O	O	O
Athletic fields	X	X	X	O
Riding stables and trails	X	X	O	O
Marinas	O	O	O	O
Tennis courts	O	O	O	O
Outdoor theaters	X	X	X	O
Swimming pools	O	O	O	O
Fairgrounds and race tracks	X	X	X	O
Commercial uses				
Aircraft sales and repairs	O	O	O	O
Flying schools	C	C	C	O
Hotels and motels	C	C	X	O
Shopping centers	C	C	X	O
Banks	C	C	X	O
Gas stations	C	C	X	O
Auto storage and parking	O	O	O	O
Office buildings	C	C	C	O
Theaters and auditoriums	X	X	X	O
Public buildings	C	C	C	O
Taxi, bus, and terminals	O	O	X	O
Memorial parks	X	X	X	O
Pet cemeteries	X	X	X	O
Restaurants and food take-outs	C	C	C	O
Retail stores	C	C	C	O
Truck terminals	O	O	O	O
Other service uses	C	C	C	O

O = COMPATIBLE

X = PROHIBITED

C = CONDITIONALLY APPROVABLE

Continued on next page.

TABLE I-4 (Continued)

AIRPORT LAND USE COMPATIBILITY LISTING

Uses	AREA			
	1	2	3	4
Industrial				
Research laboratories	C	C	C	O
Warehouses	O	O	O	O
Aircraft factories	O	O	C	O
Air freight terminals	O	O	O	O
Non-air-related manufacturing	C	C	C	O
Rail sidings	O	O	O	O
Other transportation parks	O	O	O	O
Petroleum and chemical products bulk storage	C	C	C	O
Utilities				
Reservoirs	C	C	O	O
Water treatment	C	C	O	O
Sewage disposal	C	C	O	O
Electrical plants	C	C	C	O
Power lines	C	C	C	O

O = COMPATIBLE

X = PROHIBITED

C = CONDITIONALLY APPROVABLE

Source: *Airport Land Use Commission Plan*, Stanislaus County Airport Land Use Commission, August 1978.

Concerned Regulatory Agencies

Several governmental agencies exercise some level of regulatory control over land use decisions in Patterson. The following paragraphs discuss those agencies which have some sort of permitting authority.

- The Stanislaus Air Pollution Control District (APCD) is responsible for granting two types permit which pertain to land use. The first, the Authority to Construct, is required for any proposal to construct, modify, or operate a facility or equipment that will emit pollutants from a stationary source in the atmosphere. The second, the Permit to Operate, must be obtained from the APCD to ensure compliance with requirements implemented with the Authority to Construct. The Permit to Construct includes a renewal requirement which creates an ongoing monitoring program.
- The California State Reclamation Board maintains jurisdiction over all Federal Flood Control Projects and levees which are either part of such projects or which may affect such projects. The Reclamation Board is authorized to grant Encroachment Permits for any activity

proposed along or near flood control levees, including changes in land use, construction, earthwork, or removal of vegetation.

- **The California Department of Fish and Game** has jurisdiction over all "waters of the state," including any lakes, streams, or rivers containing fish or wildlife resources. The Department of Fish and Game has authority over two permitting processes. Streambed Alteration Agreements are required for projects which alter the flow of any lake, stream or river in the state. Suction Dredging Permits are required for projects involving suction or vacuum dredging activities in state waterways.
- **The Central Valley Regional Water Quality Control Board (RWQCB)** maintains jurisdiction over discharges into all rivers, creeks, streams, and canals in the area, and regulates discharges to groundwater. Any project that will discharge wastes into any surface waters must obtain waste discharge requirements from the RWQCB. These requirements serve as the Federal National Pollutant Discharge Elimination System (NPDES) Permit.
- **The California Department of Transportation (Caltrans)** has authority over all State highway and freeway right-of-ways, including easements, and undeveloped rights-of-way which have been acquired in anticipation of future construction. Any project which proposes to construct a road connection or perform earthwork within a State highway or freeway must obtain an Encroachment Permit from Caltrans.
- **The United States Army Corps of Engineers**, pursuant to the Rivers and Harbors Act, the Army Corps maintains jurisdiction over all navigable waterways (including nonnavigable streams, creeks, marshes, and diked lands) and requires a permit for any work within these waterways.

Reviewing Agencies

In addition to those regulatory agencies with direct permitting authority, several local, state, and federal agencies are involved with the permit and environmental process. These agencies, while not issuing permits, have particular areas of expertise or maintain certain review authority and may comment on various aspects of project development.

- **The California Department of Water Resources (DWR)** reviews projects and comments in relation to State Water Project facilities such as the Delta Cross Channel and the California Aqueduct. The DWR also coordinates CEQA and NEPA comments for many departments within the State Resources Agency.
- **The California Department of Parks and Recreation** reviews development projects in relation to State recreation facilities. The Department has also prepared recreation plans covering a large area which would be used in the review of projects, while the **State Office of Historic Preservation**, within Parks and Recreation, is the designated State Historic Preservation Office (SHPO) and monitors State and federal registered historical resources as well as other statutory responsibilities.
- **The State of California Native American Heritage Commission** reviews projects and comments on potential impacts to Native American archeological resources. The Commission is directly involved with a procedure if Native American artifacts or remains are discovered during construction activities.

- **The California Department of Fish and Game**, as a trustee agency, reviews projects and comments on potential impacts to fish and wildlife resources in general, and identifies potential impacts to endangered or threatened plant or animal species under the California Endangered Species Act. The Department is required to issue a written finding indicating whether a proposed project would "jeopardize" the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of the species. If the Department makes this "jeopardy" finding, it is then required to develop "reasonable and prudent alternatives" to conserve the endangered or threatened species.
- **The California State Clearinghouse**, within the Office of Permit Assistance, is the point of contact for review of environmental documents where one or more State agencies will be responsible or trustee agency. The Clearinghouse circulates environmental documents among State agencies, coordinates review, and forwards comments to the lead agency.
- **The United States Bureau of Reclamation** maintains authority over federal water project facilities, including and the Federal Flood Control Project Levees and reviews development projects for potential effects to these facilities.
- **The United States Environmental Protection Agency (EPA)** has review authority over environmental documents that are prepared and circulated pursuant to the National Environmental Protection Act (NEPA). The EPA can comment on the draft EISs, and NEPA procedures require the filing of final EISs with the EPA. The EPA has authority over development projects pursuant to Section 404 of the Clean Water Act, which overlaps the Army Corps of Engineers authority. Generally, the EPA reviews Department of Army Permits for compliance with guidelines for implementing Section 404 requirements. The EPA can, in rare cases, override an Army Corps of Engineers decision on a Department of Army permit in order to prohibit discharges into waterways.
- **The United States Fish and Wildlife Service** must be consulted on all federal projects, such as the Army of Corps of Engineers--Department of Army Permit, pursuant to the Fish and Wildlife Coordination Act. The Service comments on potential project effects on "endangered or threatened" plant and animal species under the Federal Endangered Species Act. In reviewing a project, the Fish and Wildlife Service could issues a "jeopardy" determination and would propose reasonable alternatives to the permitting agency similar to the State Department of Fish and Game process. The Fish and Wildlife Service also comments generally on potential effects on fish and wildlife resources.
- **The National Marine Fisheries Service** is also consulted on all Department of Army Permits as part of the Fish and Wildlife Coordination Act. The National Marine Fisheries Service reviews development projects in relation to overall effects on anadromous fish such as salmon, striped bass, and steelhead. The Service also considers any endangered or threatened anadromous fish which may exist in the area.

FINDINGS

- The 1978 General Plan has been the official development guide for the City of Patterson for ten years. The existing plan is outdated, and does not reflect the growth and changes which have taken place in Patterson in the 1980s. The plan also provides for only limited growth outside the present city limits.
- A comparison of the City's zoning map with the General Plan map reveals that there are no notable inconsistencies between them.
- About 70 percent of incorporated lands in the city is zoned for residential uses, 12 percent is zoned for industrial uses, and 7 percent for commercial.
- Over 90 percent of the land in the Planning Area is devoted to agricultural uses. For non-agricultural land, 41 percent is devoted to residential uses, 26 percent for public and private institutional uses (schools, parks, churches), 10 percent is devoted to industrial uses, 5 percent to commercial uses, and 18 percent is vacant.
- The City's sphere of influence was adopted in 1984. The City has since grown rapidly and has used up almost all land within its sphere of influence. It has also expanded its water supply and sewage treatment capacity.
- Stanislaus County recently revised its general plan. The County General Plan provides for agriculture use throughout most of the unincorporated Planning Area. The County's Urban Transition designation provides for compatibility and consistency between the City and County General Plans, but also permits the County to approve development within Patterson's sphere of influence without annexation to the city, as long as it is consistent with the General Plan.
- Almost all of the unincorporated Planning Area is zoned for Urban Transition or Agriculture under the County General Plan, with the exception of a small area next to Interstate 5 zoned for Highway Commercial.
- The Planning Area includes lands within the boundaries of two airport land use planning areas: Patterson Airport and Crows Landing Naval Auxiliary Landing Field. Future development in these regions may be restricted by noise and height limitations.
- A number of other agencies have regulatory authority or responsibility to review actions in the Planning Area.

PERSONS CONSULTED

Bruch, Harter, Acting Planning Director, City of Patterson

Sellers, Chip, Assistant Planner, Stanislaus County

CHAPTER II HOUSING

BIBLIOGRAPHY

"A Town's Founding," *The Gateway (Patterson Township Historical Society Bulletin)*, Volume 1, Number 1, June 1978.

City of Patterson, *General Plan*, 1978.

City of Patterson, *Preliminary General Plan Environmental Impact Report*, 1985.

Del Puerto Hospital District, *Twenty-Year Development Plan for Del Puerto Hospital*, Prepared by Cattaneo & Stroud, Burlingame, California, 1985.

Stanislaus County, *Final Draft Hazardous Waste Management Plan*, August 1988.

Stanislaus County, *General Plan*, June 1987.

Stanislaus County, *General Plan Support Documents*, 1987.

Stanislaus County Airport Land Use Commission, *Airport Land Use Commission Plan*, August 1978.

Memo, Airport Land Use Commission from ALUC Staff, August 13, 1983.

Stanislaus County Local Agency Formation Commission, *Sphere of Influence for the City of Patterson* (Resolution No. 84-41), 1984.

HOUSING

HOUSING

Unemployment, however, is not the only factor that has caused the housing market to decline. The housing market has been in a decline since the early 1980s, and this has been caused by a number of factors. One of the main factors is the increase in the number of people who are moving out of the state. This has been caused by a number of factors, including the increase in the number of people who are moving out of the state to other states, the increase in the number of people who are moving out of the state to other countries, and the increase in the number of people who are moving out of the state to other parts of the world. Another factor is the increase in the number of people who are moving out of the state to other parts of the world. This has been caused by a number of factors, including the increase in the number of people who are moving out of the state to other parts of the world, the increase in the number of people who are moving out of the state to other countries, and the increase in the number of people who are moving out of the state to other parts of the world.

HOUSING STOCK PROFILE

Housing Stock Growth and Composition

San Diego's housing stock has increased from approximately 1.5 million units in 1960 to over 2.5 million units in 2000. Table 2.1 and Figure 2.1 show the housing stock growth and composition by type of unit. The housing stock has grown by 67% since 1960, and the composition of the housing stock has changed significantly. In 1960, the housing stock was composed of 60% single-family detached units, 20% single-family attached units, 10% multi-family units, and 10% mobile homes. By 2000, the housing stock was composed of 45% single-family detached units, 25% single-family attached units, 15% multi-family units, and 15% mobile homes. This change in the housing stock has been caused by a number of factors, including the increase in the number of people who are moving out of the state to other parts of the world, the increase in the number of people who are moving out of the state to other countries, and the increase in the number of people who are moving out of the state to other parts of the world.

TABLE 2.1
NUMBER AND TYPE OF DWELLING UNITS
City of San Diego
1960 to 2000

Year	1960		1970		1980		1990		2000	
	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total
1	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
2	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
3	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
4	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
5	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
6	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
7	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
8	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
9	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%
10	1,500,000	100%	1,800,000	120%	2,200,000	147%	2,500,000	167%	2,800,000	187%

Source: California Department of Finance.

CHAPTER II HOUSING

CHAPTER II

HOUSING

INTRODUCTION

Under the requirements of state law, every city and county in California must prepare a housing element as part of its general plan. The housing element must document in detail the existing housing stock and existing and projected housing needs. Responding to these requirements, this chapter profiles Patterson's existing housing, assesses existing and projected needs, analyzes resources available to meet these needs, and reviews governmental and non-governmental constraints on the production of affordable housing. Appendix B at the end of this report summarizes available housing programs and Appendix C summarizes special state housing requirements.

HOUSING STOCK PROFILE

Housing Stock Growth and Composition

Patterson's housing stock has historically been composed primarily of single-family homes. Table II-1 and Figure II-1 show how this has become increasingly so throughout the 1980s, as single-family units have come to represent almost three-quarters (74.8 percent) of the city's total units in 1988. This total is only slightly higher than Stanislaus County's 73.1 percent, but significantly higher than the statewide total of 60.9 percent. A corresponding comparison of multi-family structures with at least five units shows that Patterson, at 7.2 percent falls below Stanislaus County's 13.8 percent and far below the California's 26.4 percent.

TABLE II-1

NUMBER AND TYPE OF DWELLING UNITS
City of Patterson
1980 to 1988

Year	Total	Single Family	% of Total	2-4 Units	% of Total	5+ Units	% of Total	Mobile- homes	% of Total
1980	1,351	952	70.5%	131	9.7%	192	14.2%	76	5.6%
1981	1,447	991	68.5%	139	9.6%	207	14.3%	110	7.6%
1982	1,429	968	67.7%	257	18.0%	113	7.9%	91	6.4%
1983	1,455	976	67.1%	257	17.7%	113	7.8%	109	7.5%
1984	1,483	1,002	67.6%	257	17.3%	113	7.6%	111	7.5%
1985	1,505	1,023	68.0%	257	17.1%	113	7.5%	112	7.4%
1986	1,575	1,034	65.7%	257	16.3%	153	9.7%	131	8.3%
1987	1,848	1,294	70.0%	261	14.1%	153	8.3%	140	7.6%
1988	2,122	1,587	74.8%	261	12.3%	153	7.2%	121	5.7%

Source: California Department of Finance.

Table II-1 shows that Patterson's overall housing stock had grown relatively modestly until 1986 when it experienced a dramatic 17.3 percent increase, followed by a 14.8 percent rate in 1987. These totals far surpassed the growth rates of the county (5.1 and 3.4 percent) for the same years. Patterson's dramatic housing stock growth is attributable almost exclusively to residential demand created by commuters from Bay Area employment centers.

The land use survey conducted in January 1988 by the City also estimated the number of housing units in the city. Table II-2 shows the survey results.

TABLE II-2
LAND USE SURVEY DWELLING UNIT ESTIMATES
City of Patterson
January 1988

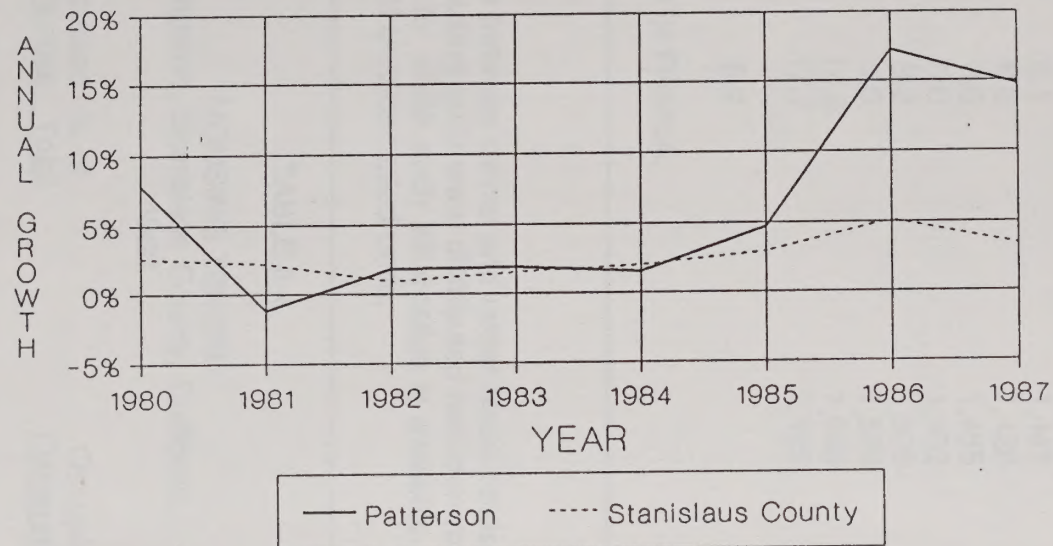
<u>Category</u>	<u>Units</u>	<u>% of Total</u>
Single-Family	1,397	68.1
Multi-Family, 2 to 4 Units	46	2.3
Multi-Family, 5 or More Units	312	15.2
Public Housing	156	7.6
Mobilehomes	122	6.0
Other	26	1.3
Total	2,050	100.0

Source: City of Patterson Land Use Inventory, January 1988.

The City's land use inventory also estimated that there were approximately 338 dwelling units in the unincorporated Planning Area.

Table II-3 compares Patterson's population and housing stock growth between 1980 and 1988. As the table indicates, total growth in the number of housing units in Patterson has roughly paralleled population growth over the eight-year period, although housing has lagged slightly behind population growth.

FIGURE II-1
HOUSING UNIT GROWTH RATES
Patterson, Stanislaus County, California



Sources: U.S. Bureau of the Census;
California Department of Finance

TABLE II-3

POPULATION AND HOUSING UNIT GROWTH: ANNUAL PERCENTAGES
Patterson
1980 to 1988

<u>Year</u>	<u>Popu- lation</u>	<u>Annual % Growth</u>	<u>Housing Units</u>	<u>Annual % Growth</u>
1980	3,908		1,351	
1981	4,145	6.1	1,447	7.1
1982	4,400	6.2	1,429	(1.2)
1983	4,411	0.3	1,455	1.8
1984	4,633	5.0	1,483	1.9
1985	4,783	3.2	1,505	1.5
1986	4,973	4.0	1,575	4.7
1987	5,695	14.5	1,848	17.3
1988	6,702	17.7	2,122	14.8
1980-1988		8.9		7.1

Source: California Department of Finance.

Housing Tenure

Tenure refers to the distinction between owner and renter households or housing units. Table II-4 shows how Patterson's housing units were distributed between rental and ownership units in 1980, the most recent date for which such information is available. It should be noted that the numbers in the table reflect only occupied units.

TABLE II-4

HOUSING TENURE
Patterson, Stanislaus County, California
1980

<u>Community</u>	<u>Occupied Rentals</u>	<u>% of Total</u>	<u>Occupied Ownership</u>	<u>% of Total</u>
Patterson	564	44.1	714	55.9
Stanislaus County	5,580	37.6	59,095	62.4
California	3,804,482	44.1	4,825,384	55.9

Source: U.S. Bureau of the Census, 1980.

As Table II-4 indicates, in 1980, Patterson's renter/owner mix differed slightly from Stanislaus County's, but was exactly the same as California's.

Vacancy Rates

The vacancy rate can be used as both an indicator of unused housing stock and as a measure of consumer opportunity for mobility and choice in living accommodations. The gross vacancy rate is a measure of vacant units as a percentage of the total housing stock. The California Department of Finance (DOF) annually estimates gross vacancy rates for all cities and counties in the state. Table II-5 summarizes vacancy rates for Patterson and Stanislaus County for the years 1981 to 1988.

TABLE II-5
VACANCY RATES
Patterson, Stanislaus County
1981 to 1988

<u>Year</u>	<u>Patterson</u>	<u>Stanislaus County</u>
1981	7.0	7.8
1982	8.6	7.8
1983	4.5	7.9
1984	2.6	7.4
1985	2.5	7.2
1986	3.0	5.9
1987	6.1	7.4
1988	4.4	7.1

Source: California Department of Finance.

As Table II-5 shows, Patterson's vacancy rate fluctuated relatively dramatically between 1981 and 1988. This fluctuation is, in part, attributable to the amount of new housing construction which took place during this period. Significant development of new housing can present problems with the tabulation of vacancy rates because of the lag time between the construction of the units and the occupation of the units. As a result, units not yet available for occupancy may be counted in the city's total unit count. Patterson's 1988 vacancy rate was, at 4.4 percent, close to the rate generally accepted as ideal (four percent) according to the California Department of Housing and Community Development (HCD).

Overcrowding

An overcrowded housing unit is defined as one in which more than one person per room (excluding bathrooms and kitchens) reside. According to the 1980 Census, 14.9 percent of Patterson's occupied housing units were overcrowded. This was significantly higher than either the countywide rate of 6.1 percent and the statewide rate of 7.4 percent.

Population Per Household

The California Department of Finance provides annual estimates of population per household. Table II-6 shows DOF's estimates for the years 1981 through 1988. As the table indicates, Patterson's household size has remained consistently higher than the county's throughout the 1980s.

TABLE II-6
POPULATION PER HOUSEHOLD
Patterson and Stanislaus County
1981 to 1988

<u>Year</u>	<u>Patterson</u>	<u>Stanislaus County</u>
1981	3.08	2.78
1982	3.15	2.79
1983	3.17	2.84
1984	3.20	2.84
1985	3.26	2.85
1986	3.25	2.81
1987	3.28	2.82
1988	3.30	2.82

Source: California Department of Finance

Housing Condition and Age

In large part, housing conditions are a function of the age of the units. Despite the generally good visual appearance of Patterson's housing, it is likely that a significant number of units are in need of at least some minor rehabilitation, if only because of the age of the units. In 1980, 797 (59.0 percent) of the city's housing units had been constructed before 1960 (see Table II-7). By comparison, the respective county and statewide percentages were 43.5 and 48.9. The difference in the percentage of units constructed before 1940 was even more pronounced. In 1980, 26.0 percent of the units in Patterson had been built before 1940, while only 13.2 percent countywide and 14.7 percent statewide were that old.

Patterson has had very few housing demolitions and very little conversion of housing to non-residential uses. If one were to assume that five percent of the units built before 1960 according to the 1980 Census have been demolished or converted since 1980, 35.7 percent of the 1988 housing stock would be nearing at least 30 years old, while 15.7 percent (those built before 1940) would be closer to 50. Units of this age are likely to need some sort rehabilitation merely because of the limited life expectancy of many of the materials used in their construction.

In January 1988, the City conducted a housing quality survey in the most deteriorated areas--the south central section and a portion of the northeast section of the city. The areas surveyed are shown in Figure II-2. A total of 1,342 housing units were surveyed. The survey identified 233

substandard units (17 percent of the total). Of the substandard homes, 57 percent needed major rehabilitation, another 32 percent needed minor rehabilitation, and 9 percent were deteriorated to the point where they were no longer suitable for rehabilitation but could only be repaired to alleviate health and safety hazards.

TABLE II-7
HOUSING STOCK AGE
Patterson
1980

	<u>Patterson</u>	<u>Stanislaus County</u>	<u>California</u>
Before 1940	351 (26.0)	13,506 (13.2)	1,359,258 (14.7)
1940-1949	222 (16.4)	14,002 (13.7)	1,128,858 (12.2)
1950-1959	224 (16.6)	16,959 (16.6)	2,026,341 (22.0)
1960-1969	270 (20.0)	20,025 (19.6)	2,201,843 (23.9)
1970-1979	284 (21.0)	37,795 (36.9)	2,506,820 (27.2)
Total Units	1,351	102,287	9,223,120

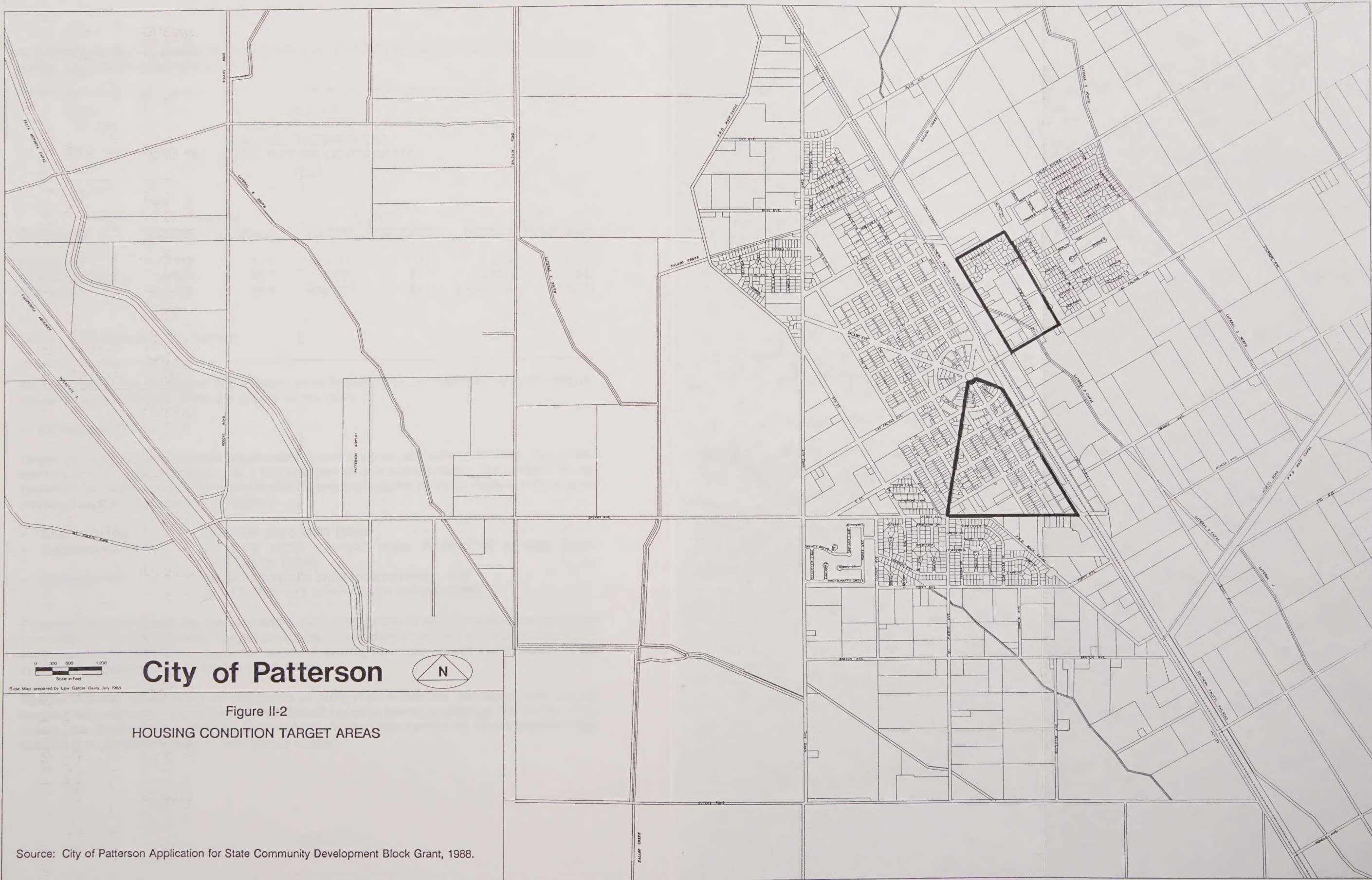
Source: U.S. Bureau of the Census, Summary Tape File 3 (STF 3), 1980

Housing Costs and Overpayment

The cost of housing has become a critical issue with respect to planning in California. Since the late 1970s, the statewide housing market has experienced dramatic price increases. The general increase is primarily attributable to changes in state tax law brought about by Proposition 13, but many housing markets in California (particularly in the Bay Area and in Los Angeles) have also seen rapid inflation of housing costs because of increasingly limited supplies of land suitable (or available) for residential development. Because of the vast amount of undeveloped land available in the Central Valley, housing has remained relatively cheap in Valley communities. Such has been the case in communities such as Tracy, Manteca, and Stockton, where large residential subdivision developments have allowed builders to take advantage of economies of scale which keep the overall cost of housing down, thereby attracting workers from large East Bay employment centers. Patterson has also recently begun to experience pressure to develop housing to accommodate East Bay commuters.

According to a study conducted in January 1988 by the California Association of Realtors (CAR), well over 50 percent of the households in the Central Valley could afford to buy an existing single-family detached home, whereas only 32 percent of the households statewide could.

Overpayment is defined as paying 25 percent or more of one's income for housing. According to the California Department of Housing and Community Development's methodology for calculating overpayment, 204 of Patterson's 1,144 households were both lower income (below 80 percent of the county median household income) and overpaying for housing in 1980. This represented 17.9 percent of the city's households. Of those households overpaying, 170 were



renters and 34 were homeowners, representing 30.7 and 5.8 percent of the city's low income renters and owners, respectively.

TABLE II-8
HOUSING OVERPAYMENT
BY LOWER INCOME HOUSEHOLDS
1980

<u>Community</u>	<u>Renters</u>		<u>Owners</u>		<u>Total</u>	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Patterson	170	30.7	34	5.8	204	17.9
Stanislaus County	13,875	42.5	5,520	11.7	19,395	24.2
California	1,153,568	35.4	438,563	11.5	1,592,131	22.5

Source: U.S. Bureau of the Census

As Table II-8 shows, Patterson had a much lower incidence of overpayment by lower income households in 1980 than either the county or the state.

HOUSING NEEDS

Under the state housing element requirement, housing needs are defined in three categories: existing needs, projected needs over a five year period, and special needs. As detailed above, based on the most current information available, existing housing needs in Patterson have been identified and are summarized as follows:

- Overcrowding: 190 of the city's units (1980)
- Substandard Units: 233 units within surveyed areas in need of at least minor rehabilitation (1988)
- Overpayment: 186 of Patterson's lower-income renters and 34 of Patterson's lower-income owners (1980)

Projected housing needs are the total additional units needed to accommodate the projected population in five years in units that are affordable, in standard condition, and not overcrowded. Projected needs, therefore, include the needs of existing residents as well as the needs of the additional households expected five years hence.

Special housing needs focus on the needs of subgroups within the population with special housing requirements. The state requires that all housing elements address the needs of the elderly, the disabled, large families, farmworkers, households headed by single mothers, and families and persons in need of emergency shelter.

Patterson's Fair Share of Projected Regional Needs

In September, 1983, the Stanislaus Area Association of Governments (SAAG) determined the assumed housing needed for Stanislaus County and its cities in accordance with Section 65584 of the *California Government Code*. The need figures generated by SAAG's *Housing Needs Report* were consistent with California Department of Finance (DOF) projections currently in effect. In 1984, AB 3618 (Roos) became law which extended the deadline for preparation of housing element updates in Stanislaus County to January 1, 1986, with the next revision to be completed by July 1, 1992. In August 1984, the Department of Finance issued new household projections which were lower than the figures used in the SAAG *Housing Needs Report*.

Based on guidance from the California Department of Housing and Community Development (HCD), cities preparing housing element updates for the January 1, 1986 deadline were advised to extend SAAG's assumed housing need through 1992. Thus, for the City of Patterson, the housing need of 1,931 total units should be attained by 1992, not 1990. According to California Department of Finance (DOF) estimates, however, Patterson surpassed this total during 1987, as the city's housing stock had grown to 2,122 by January 1988. According to the *Government Code*, SAAG is not required to produce another regional housing needs share report until 1991, one year before the next mandatory housing element revision is required.

Special Needs

Beyond the general housing needs documented above, state law requires that the housing element include an assessment of the housing needs of special groups within the community, including those of the disabled, the elderly, large families, farmworkers, families with female heads of households, and families and persons in need of emergency shelter.

Disabled Persons

The term "disabled" refers to a disability (physical, mental, or sensory) which prevents or precludes a person from doing work either in or outside of the home. The number of disabled persons in a community has important implications for providing certain social services, in the removal of barriers to facilities, and in developing housing which has specialized access for disabled residents.

According to the 1980 Census, 191 of Patterson's 2,089 residents aged 16 to 64 had work disabilities. This represented 8.4 percent of the work force. A person with a work disability may have a health condition which limits the kind or amount of work which he or she can do or which prevents working at a job or business altogether. A work disability may also be defined as a health condition which limits the choice of jobs. Of those identified as having work disabilities according to the 1980 Census, 139 were prevented from working altogether and 29 were in the labor force. The remaining 23 did not work, but were not entirely prevented from doing so. Table II-9 shows work disability information for Patterson, Stanislaus County, and California according to the 1980 Census.

TABLE II-9
WORK DISABILITY STATUS BY PERCENTAGE
Patterson, Stanislaus County, California
1980

	<u>Patterson</u>	<u>Stanislaus County</u>	<u>California</u>
With Work Disability In Labor Force	1.3	3.8	3.2
Not in Labor Force			
Prevented from Working	6.1	5.8	4.1
Not Prevented	1.0	0.9	0.9
Total with Work Disability	8.4	10.4	8.2
No Work Disability	91.6	89.6	91.8

Source: U.S. Bureau of the Census, 1980.

The Census also identified those residents with public transportation disabilities. A public transportation disability is a health condition which makes it difficult or impossible to use buses, trains, subways, or other forms of public transportation. As Table II-10 indicates, in 1980, 3.6 percent of Patterson's residents aged 16 and over had transportation disabilities. 2.5 percent of those between 16 and 64 had such disabilities and 9.3 percent of the city's residents over 65 had public transportation disabilities. While Patterson's age group percentages differed slightly from the county's and the state's, the overall rate was about the same.

TABLE II-10

PUBLIC TRANSPORTATION DISABILITY BY AGE GROUP BY PERCENTAGE
Patterson, Stanislaus County, California
1980

	<u>Patterson</u>	<u>Stanislaus County</u>	<u>California</u>
16 to 64 with Disability	2.5	1.8	1.7
16 to 64 without Disability	97.5	98.2	98.3
65 and over with Disability	9.3	15.4	15.4
65 and over without Disability	90.7	84.6	84.6
16 and over with Disability	3.6	3.7	3.4
16 and over without Disability	96.4	96.3	96.6

Source: U.S. Bureau of the Census, 1980.

Elderly

The 1980 Census indicated that 15.9 percent of the city's population was 60 years and older, and 11.5 was 65 years or older. These percentages are similar to those for Stanislaus County, where 15.2 percent of the population was over 60 and 11.0 percent was over 60. Statewide, 14.4 percent of the population was at least 60 and 10.2 percent was 65 or older.

Large Families

Family size is an important consideration when it comes to planning for housing. Very simply, areas which have large concentrations of small families or single-person households need to plan for smaller units, and areas with concentrations of large families need to assure that units large enough to accommodate such families are available. Unfortunately, however, information concerning family size is difficult to gather. The 1980 Census provides some minimal data on the number of persons occupying housing units, but does not correlate this information with information on the number of rooms in the units. The census indicated that 11.3 percent of Patterson's 1980 occupied housing units had six or more residents, significantly higher than Stanislaus County and California, both of which had 5.6 percent.

Farmworkers

Because specific data on the number of farmworkers in a community is not systematically collected, it is difficult to assess the precise needs of this group. The Stanislaus Area Association of Governments as part of its *Housing Needs Report* estimated that farmworker housing needs would decline through the end of the decade. Recent developments, such as the increased state minimum wage and new federal immigration legislation, have led to increased numbers of migrant workers seeking housing in the area.

The Stanislaus County Housing Authority operates the Walnut Acres Migrant Center in Patterson. Walnut Acres has 30 barracks-like units capable of accommodating 30 families. The units, which suffer from structural problems and, until recent remedial measures were undertaken, posed health problems because of exposed lead-based paint, will be replaced by 44 new duplex units if the federal government provides funding for the \$2.5 million project.

In addition to the Housing Authority's units, the United States Farmers' Home Administration (FmHA) has 66 year-round farmworker units in Patterson and the California Department of Migrant Services has 45.

Based on estimates provided by the Stanislaus County Housing Authority, it appears that Patterson is housing a disproportionately large number of farmworkers.

Single Parent

10 percent of Patterson's families are headed by single females. Only 24 percent of these households are at a status above poverty. The county has only 1.5 percent of its households headed by single females. Also, 42 percent of these households maintain an above-poverty status.

Homeless

The City of Patterson has no reliable method of estimating the number of persons that may be classified as homeless. The Stanislaus County Housing Authority provides temporary shelter (overnight) for those individuals considered "homeless." As a consequence, the City has determined that this is not an area of need.

AVAILABILITY OF LAND AND SERVICES FOR RESIDENTIAL DEVELOPMENT

State law requires that housing elements contain an analysis of the availability of land for future residential growth and the adequacy of public facilities and services to accommodate this growth. Following are brief discussions of these issues as they pertain to Patterson.

City of Patterson Zoning Ordinance

The City of Patterson Zoning Ordinance provides for four districts which may be used for residential purposes. The zoning districts are as summarized follows:

- The R-1, **Single Family Residential Zone** is intended to provide for the development of single family homes to urban standards, together with schools, parks, open spaces, and other public services required for a satisfactory family environment. Only those accessory uses and accessory buildings customarily appurtenant to single family detached dwellings are permitted. The R-1 zone permits seven (7) dwellings units per net subdivision acre.
- The R-2, **Two Family Residential Zone** is intended to provide for the development of two family homes to urban standards, where a compatible mingling of single family and duplex dwellings is likely to occur, together with schools, parks, open spaces, and other public services required for a satisfactory family environment. Single family detached dwellings are permitted use in R-2 Zones. Only those accessory uses and accessory buildings customarily appurtenant to single family

and duplex residential dwellings are permitted. The R-2 zone permits twelve (12) dwelling units per net subdivision acre.

- The **R-3, Medium Density Multiple Family Residential Zone** is intended to provide for the development of multiple family dwelling to urban standards together with schools, parks, open spaces, and other public services required for a satisfactory family environment. Duplex dwelling units are a permitted use in R-3 Zones. Only those accessory buildings customarily appurtenant to duplexes and multiple family residential dwellings are permitted. The R-3 zone permits twenty (20) dwelling units per net subdivision acre.
- The **Planned Development (P-D) Zone** is designed to accommodate various types of development, such as neighborhood and community shopping centers, professional and administrative areas, centers for senior citizens, multiple housing developments, commercial services centers, industrial parks, and any other combination of uses which can be made appropriately a part of a Planned Development. Any and all uses are shown on the specific development plan for the particular P-D Zone as approved by the City Council. A Planned Development Zone may be applied for to change any other existing zone upon approval of a specific development plan. All densities in P-D-zoned areas shall be established by the specific development plan as approved by the City Council.

Available Residential Sites

Patterson has experienced tremendous residential growth since 1986 which has used up most of the available residential land within the city limits. Although 145 acres of residentially zoned land were vacant as of January 1988, approximately 140 acres of this land was committed in approved subdivisions, with roughly 1,300 single family dwelling units.

Table II-11 lists the estimated acreage which is not subdivided and the number of housing units which could be developed within Patterson. The city limits were used for the survey due to the immediate availability of utility services to these sites. A range of estimates for the potential number of housing units is shown by applying both historical densities for past development and the maximum densities allowed under the Patterson Zoning Ordinance and State provisions.

TABLE II-11
UNCOMMITTED LAND AVAILABLE FOR RESIDENTIAL DEVELOPMENT
By Zoning Designation

<u>Zones</u>	<u>Available Acreage</u>	<u>Average Development Factor</u>	<u>Estimated Units</u>	<u>Maximum Density</u>	<u>Estimated Units</u>
R-1	6	4.5	27	7	42
R-2	--	10.0	--	12	--
R-3	11	18.0	198	20	220
TOTALS	17		225		262

Source: City of Patterson Land Use Inventory, January 1988, and City of Patterson Zoning Ordinance.

As Table II-11 shows, Patterson has roughly 17 acres of available land for residential purposes within the existing corporate limits which is not already approved for residential subdivisions. A range of from 225 to 262 housing units could be built in these areas. To continue residential growth, the City will have to annex additional land.

Availability of Services

The City of Patterson can supply water and sewer services to all areas within the City limits. Expansion of the city will require additional sewage lines and water distribution mains. The sewer plant and water supply have the capacity to serve a population of approximately 10,000. Growth beyond this would require sewer plant expansion and additional wells. Chapter VI, "Public Facilities and Services," provides detailed discussions of Patterson's public services.

GOVERNMENTAL CONSTRAINTS ON THE PRODUCTION OF HOUSING

While local governments have little influence on such market factors as interest rates, their policies and regulations do constrain the free operation of the housing market. For the most part, local regulations play a legitimate role in protecting the public's health, safety, and welfare. In some cases, however, local regulations may restrict the operation of the housing market unnecessarily. Examination of the local regulatory structure can highlight those areas of "excessive" regulations where steps can be taken to remove or minimize obstacles to residential development.

A factor often cited by private developers for spiraling housing costs and the decrease in affordable housing for all sectors of the population is local governmental regulation. Governmental constraints imposed by the Federal, State, or local government can influence development. Such controls can be used to facilitate and encourage the development of

housing or may work in reverse posing barriers and frustration for the local developer. This section discusses efforts Patterson has made for the development, maintenance and improvement for housing in five areas: land use controls, building codes and enforcement, on- and off-site improvements, fees, processing and permit procedures.

Land Use Controls

Land use controls are generally minimum standards included in zoning and subdivision ordinances. The Patterson Zoning Ordinance controls such features as residential densities, lot sizes, and yard setbacks. Duplexes and apartments are alternatives to the single family home allowable in R-2 and R-3 zoned areas. Patterson has also accommodated low and moderate income needs by allowing for increased densities in planned development subdivisions.

The Subdivision Ordinance governs the process of converting raw land into building sites. It allows the City to control the internal design of each new subdivision so that its pattern of streets, lots, and public utilities will be safe, pleasant, and economical to maintain. Again, overly restrictive standards will result in greater land development costs and/or lack of development interest. The City has worked very willingly with developers to cut costs. Planned developments that allow greater freedom for the contractor have been successful in cutting costs.

Building Codes and Enforcement

While minimum building codes enforced by State law are essential to the physical construction of safe and lasting housing, additional standards controlling the design of housing may increase construction costs unnecessarily. Patterson has modified its building code to the requirements specified by State law. Because of the expansive soils in Patterson, soil reports are required for new subdivisions. Vapor barriers for concrete slab on grade floors is one of several possible methods for mitigating the effects of expansive soils. This is the only additional requirement adopted by Patterson other than the mandated State law provisions.

On- and Off-Site Improvements

Land improvements can be categorized as those designated to modify the existing parcel of land, an on-site improvement, or those to modify the exterior, or off-site areas. On-site improvements include such items as required off-street parking, fences and landscaping to control access and/or noise. Such public off-site improvements include curbs, gutters, sidewalks, pavement, adequate drainage, street lighting, and street trees. These have been deemed necessary to maintain the public health, safety, and welfare standards for a residential community.

Fees

While fees can contribute significantly to increased housing costs, Patterson has had very low planning fees. In August 1988, Patterson increased its fees to cover its actual processing costs. Patterson's planning fees are listed in Table II-12.

TABLE II-12

PLANNING FEES
City of Patterson
August 1988

Variance	\$365
Conditional Use Permit	230
General Plan Amendment	545
Lot Line Adjustment	365
Tentative Parcel Map	365
Tentative Subdivision Map	545
Time Extensions	130
Appeals	130
Home Relocation Permits	230

Source: *Patterson Irrigator*, "Planning Fees Soaring Higher," August 2, 1988.

Since the passage of Proposition 13 in 1978, local governments have come to rely increasingly on impact and connection fees to finance local infrastructure. The City of Patterson charges several fees on residential developments at the building permit stages, as shown in Table II-13.

TABLE II-13
DEVELOPMENT FEES
City of Patterson
January 1988

Sewer Connection	\$1,440	per dwelling unit
Water Connection	\$660	per dwelling unit
Water Meter (3/4")	\$250	per dwelling unit
Drainage	\$1,087 to \$5,400	per acre (depending on drainage area)
Park Land Dedication	0.018	acres for single-family residential. In-lieu fees based on land value ¹
Street Trees	1½ 3 \$75	trees per lot trees per corner lot per tree
Municipal Facility Fee	\$1.00	per square foot
School Impact Fee ²	\$1.53	per square foot

¹Land value as of January 1988 was \$35,000 per acre

²Levied by Patterson Unified School District

Source: City of Patterson Planning Department, January 1988.

Processing and Permit Procedures

An expeditious completion of processing and permit procedures can minimize development holding costs dramatically. Unfortunately delays often occur in the process which later translate into increased housing costs for the home buyer. Patterson follows differing processing procedures for various planning permits. Zoning modifications must be reviewed by both the Planning Commission and City Council, requiring an average of 60 days. Tentative maps for subdivision development must be reviewed by both the Planning Commission and City Council requiring an average of 60 days. All other use permits, environmental initial assessments and other project approvals of this type must be reviewed by the Planning Commission, requiring an average of less than 30 days. In cases where an Environmental Impact Report is required, several more months of time will be added to the processing time.

Staffing

Limitations on staffing can affect development processing and ultimately home construction costs through inadvertent delays. As Patterson has grown, the City has expanded its staffing to include a full-time Planning Director, building inspector, and City Engineer (as of Fall 1988).

As the city continues to grow, provision of staff resources will need to be evaluated to maintain effective and timely development processing.

NONGOVERNMENTAL CONSTRAINTS ON THE PRODUCTION OF HOUSING

The availability of housing is strongly influenced by market factors over which local government has little or no control. State law requires that the housing element contain a general assessment of these constraints. This assessment can serve as the basis for actions which local governments might take to offset the effects of such constraints. The primary market constraints to the development of new housing are the costs of constructing and purchasing new housing. These costs can be broken down into four categories: materials, labor, land, and financing. Patterson can be considered as part of a very broad general housing market that includes the Central Valley area. For the most part, housing cost components in Patterson are comparable to those in other parts of the general market area. The following paragraphs briefly summarize these components vis-a-vis the local market and the statewide market.

Material Costs

A major component of the cost of housing is the cost of building materials, such as wood and wood-based products, cement, asphalt, roofing materials, and plastic pipe. Prices for these goods are affected primarily by the availability and demand for such materials.

Because the Central Valley is served by such a well-developed regional transportation network and because many of the materials needed for construction are produced locally, availability of materials is excellent. The demand for building materials is also very high because there is so much housing development occurring in the area. The result of the combination of excellent supply and high demand is a very competitive market and, therefore, relatively low prices. In addition, the land in Patterson which is most likely to be developed in the future for housing is well-suited for the kind of large projects which allow developers to realize economy-of-scale savings on materials.

The costs of building materials in the Central Valley in general and in Patterson in particular are relatively low and, therefore, do not constitute a constraint to the development of affordable housing.

Cost of Labor

Another major cost component of new housing is labor. Inflated labor costs due to high wage rates significantly increase the overall cost of housing in some markets. The cost of labor in Patterson is, however, relatively low for a number of reasons. Overall, the Central Valley's cost of living is relatively low; wage scales in the area, therefore, tend to be somewhat lower than in markets with higher living costs, such as the San Francisco Bay Area. Also labor is generally less costly because the area is predominantly non-union. Labor in highly unionized markets is typically more expensive.

Land Costs

The effect of land costs on residential development can easily be identified. Costs associated with the acquisition of land include the market price of raw land and the cost of holding land throughout the development process. These costs can account for as much as half of the final sales price of new homes in very small developments or in areas where land is scarce. Among the variables affecting the cost of land are its location, its amenities, the availability of public services, and the financing arrangements made between the buyer and seller.

Because of the abundant availability of raw land in the area, land costs in the Central Valley housing market area are generally low.

Cost and Availability of Financing

The cost and availability of capital financing affect the overall cost of housing in two ways. First, when the developer uses capital for initial site preparation and construction and, second, when the home buyer uses capital to purchase housing.

The capital used by the developer is borrowed for the short-term at commercial rates, which are considerably higher than standard mortgage rates. Commercial rates nonetheless drop when the overall market rates decrease, so the currently low interest rates should have a positive effect on the housing construction market.

The home buyer uses capital financing in the form of long-term mortgage loans. Market rates for standard home loans had dropped below ten percent for the first time in several years, so financing costs favored the buyer. Recently, however, in August 1988, interest rates have again risen above the ten percent level. Table II-14 shows how the variation in interest rates affects the buyer's monthly mortgage payments on a range of loan amounts.

TABLE II-14

MONTHLY MORTGAGE PAYMENTS

Interest Rate (%)	Original Loan Amount					
	<u>\$50,000</u>	<u>\$60,000</u>	<u>\$70,000</u>	<u>\$80,000</u>	<u>\$90,000</u>	<u>\$100,000</u>
9.0	402	483	563	644	724	805
9.5	420	505	589	673	757	841
10.0	439	527	614	702	790	878
10.5	457	549	640	732	823	915
11.0	476	571	667	762	857	952
11.5	495	594	693	792	891	990
12.0	514	617	720	823	926	1,029

Note: Based on a 30-year, fixed-rate mortgage, not including real estate taxes and home insurance. These costs add about 2 percent of the sales price annually.

Source: J. Laurence Mintier & Associates

Table II-15 relates loan interest rates to home loan affordability at various income levels. The figures in the table are based on principal and interest equaling 25 percent of the gross income and do not include taxes and insurance, which could add approximately 15 percent to the monthly payments. Most lenders, however, are qualifying buyers somewhere between 28 and 36 percent of total income. Table II-15, therefore, provides only a thumbnail estimate of loan affordability.

TABLE II-15

INCOME/LOAN AMOUNT AFFORDABILITY

Interest Rate	Annual Income						
	<u>\$20,000</u>	<u>\$25,000</u>	<u>\$30,000</u>	<u>\$35,000</u>	<u>\$40,000</u>	<u>\$45,000</u>	<u>\$50,000</u>
9%	1,560	63,550	77,500	89,600	103,200	116,000	128,000
10%	47,480	59,349	71,219	83,089	94,959	106,829	118,699
11%	43,753	54,691	65,629	76,567	87,505	98,443	109,382
12%	40,503	50,635	60,761	70,888	81,015	91,142	101,269
13%	37,667	47,083	56,500	65,916	75,333	84,750	94,166
14%	35,166	43,957	52,748	61,450	70,331	79,122	87,914

Source: National Association of Home Builders

The availability of financing is another important consideration, particularly for the builder. The cost of financing is irrelevant if lenders are unwilling to lend money to developers in a particular market. In Patterson, partly because of the abundance of locally-based financial institutions, financing is readily available.

EFFECTS OF CONSTRAINTS ON TOTAL DEVELOPMENT COSTS

Given all of the above considerations, total development costs in Patterson will probably be very low. The overall effect of the various governmental and nongovernmental constraints is relatively insignificant in Patterson. Primarily because of low land costs, housing can still be produced more cheaply in the area than it can in other parts of the state.

PUBLICLY-OWNED SURPLUS LAND

According to state law, all public agencies intending to dispose of surplus land must first send a written offer to any local agencies within whose jurisdiction the land lies to sell or lease the land for the following purposes: recreation or open-space uses; enterprise zone uses; schools; or development of low- and moderate-income housing. In the event that the agency disposing the land receives more than one offer, it shall give first priority to the entity which agrees to use the site for housing for low- or moderate-income housing, unless the land is already being used for park or recreation uses, in which case the entity offering to continue these uses shall receive priority (Government Code Section 54220 et seq.). There is no such land in Patterson that would be suitable for residential development.

OPPORTUNITIES FOR ENERGY CONSERVATION

Residential energy conservation measures can take two forms: those applied to the construction of new housing and those added to existing housing to increase energy efficiency (retrofitting).

The State requires local governments to implement energy conservation standards for all new residential development. Under these requirements, every new residential building constructed must meet rigorous building standards for heat gain and heat loss. In mandating these requirements, the State has largely preempted the authority of local governments to regulate building construction with respect to energy conservation.

Patterson incurs mildly cold winters and very warm summers. Pacific Gas & Electric Company (PG&E) is the utility company serving the Patterson area with gas and electric service. PG&E promotes energy conservation and has implemented programs to inform customers of home energy saving techniques. To encourage the public to weatherproof their homes, thereby decreasing heating and cooling costs, PG&E offers a zero interest payment loan program for customers to make such improvements possible.

Modesto Junior College operates the "Sunrise Energy Center." The Center was started under a California Energy Commission grant for the development of an energy resource center. "Sunrise" offers conservation and solar energy classes, consumer product information and computer programs for conservation and solar energy. The center provides an informational resource clearinghouse for residents and businesses with a statewide computer link; experimentation in alternative fuels such as methane, solar and gasohol; outreach services to improve farming practices; and the building in which the center is housed serves as a demonstration/laboratory for solar projects and weatherization.

Self-Help Enterprises provides weatherization grants for the poor and elderly in the County.

New State energy conservation standards for residential buildings (Title 24, California Administrative Code) took effect July 13, 1982. However, legislation deferred the implementation of the new standards until June 15, 1983, for single family units and until December 31, 1983, for other residential uses.

The new standards recognize climatic differences within the state. They permit considerable flexibility to the builder, as long as a minimum "energy budget" is achieved. The California Energy Commission estimates new regulations will add about \$2,000 to the cost of a home, and will cut energy consumption costs of the average of about 50%. The standards are State-mandated and do not require further local code changes.

CURRENT AND PAST HOUSING PROGRAMS IN PATTERSON

In July 1988, the City received a \$600,000 California Community Development Block Grant (CDBG) to implement housing rehabilitation in targeted areas (see Figure II-2) to preserve and increase housing opportunities for low-income residents.

The rehabilitation program will provide financing based on Below-Market Interest Rate (BMIR) loans with an option for Deferred Payment Loans (DPL) for the elderly. The City's program will also allow for participation of households whose housing costs exceed 25 percent of income, along with a limited option for grants under special circumstances. Straight BMIR loans with interest set at three percent will be offered as financing mechanisms for owner-occupants whose housing costs are less than 25 percent of income and whose overall monthly indebtedness is less than 50 percent of monthly income.

The Stanislaus County Housing Authority administers the Section 8 Rental Subsidy program in Stanislaus County. In 1985, there were 1,780 certificates being use countywide, 6 of which were located in Patterson. The Stanislaus County Housing Authority also owns and operates 30 conventional low income housing units in Patterson, 66 year-round farm labor housing units, and 50 migrant worker housing units.

FINDINGS

- Patterson's housing stock has historically been composed primarily of single-family homes; this has become increasingly so throughout the 1980s, as single-family units have come to represent almost three-quarters (74.8 percent) of the city's total units in 1988.
- Patterson experienced a dramatic 17.3 percent increase in the number of housing units in 1986, followed by a 14.8 percent increase in 1987. These totals far surpassed the growth rates of the county (5.1 and 3.4 percent) for the same years. Patterson's dramatic housing stock growth is attributable almost exclusively to residential demand created by commuters from East Bay employment centers.
- Total growth in the number of housing units in Patterson has roughly paralleled population growth between 1980 and 1988, although housing has lagged slightly behind population growth.
- In 1980, Patterson's renter/owner mix differed slightly from Stanislaus County's, but was exactly the same as California's.
- Patterson's vacancy rate has fluctuated significantly since 1981. In 1988, it was 4.4 close to the generally-accepted ideal rate according to the California Department of Housing and Community Development (HCD).
- According to the 1980 Census, 14.9 percent of Patterson's occupied housing units were overcrowded. This was significantly higher than either the countywide rate of 6.1 percent and the statewide rate of 7.4 percent.
- The City has received a community development block grant to rehabilitate substandard housing in two targeted areas of town. In other areas, despite the generally good visual appearance of Patterson's housing, it is likely that a significant number of units are in need of at least some minor rehabilitation, if only because of the age of the units.
- Patterson had a much lower incidence of low income overpayment in 1980 than either the county or the state.
- According to California Department of Finance (DOF) estimates, Patterson surpassed its total regional fair share housing need for 1992 during 1987. The Stanislaus Area Association of Governments (SAAG) is not required to produce another regional housing needs share report until 1991, one year before the next mandatory housing element revision is required.
- Based on estimates provided by the Stanislaus County Housing Authority, it appears that Patterson is housing a disproportionately large number of farmworkers.
- The Stanislaus County Housing Authority provides temporary shelter (overnight) for those individuals considered "homeless." As a consequence, the City has determined that this is not an area of need.
- Dramatic growth in the last few years has nearly exhausted Patterson's supply of residentially-zoned land. To continue residential growth, the City will have to annex additional land.

- The overall effect of the various governmental and nongovernmental constraints is relatively insignificant in Patterson. Primarily because of low land costs, housing can still be produced more cheaply in the area than it can in other parts of the state.

BIBLIOGRAPHY

California Department of Finance, *Summary Report: Controlled County Population Estimates for Stanislaus County, 1981-1988*

City of Patterson, *Application for State Community Development Block Grant, 1988.*

Patterson, City of, *1985 Housing Element*

Stanislaus Area Association of Governments, *Stanislaus County Projections*, April 1985.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, California.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, Patterson.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, Stanislaus County.

GLOSSARY

Condominium - Ownership that enables a person to own an apartment or house in a development of similar units and hold a common or joint-ownership in common areas, hallways, entrances, elevators, etc. The owner has a deed to the individual unit, and, very likely, a mortgage on the unit, and also holds a common or joint ownership in all common areas, such as grounds, lobbies, and elevators. A condominium unit need not be occupied by the owner to be counted as such.

Contract Rent - The monthly rent agreed to, or contracted for, regardless of any furnishings, utilities, or services that may be included.

Dwelling Unit - One (1) or more habitable rooms which are designed to be occupied by one (1) family with facilities for living, sleeping, cooking, eating, and sanitation.

Family - Two or more persons, including the householder, who are related by birth, marriage, or adoption, and who live together as one household.

Gross Rent - Contract rent plus the estimated average monthly cost of utilities (water, electricity, gas) and fuels (oil, coal, kerosene, wood, etc.) to the extent that these are paid for by the renter (or paid for by a relative, welfare agency, or friend) in addition to the rent.

Household - The person or persons occupying a housing unit.

Housing Units - A house, apartment, mobilehome or trailer, group of rooms, or single room occupied as a separate living quarter or, if vacant, intended for occupancy as a separate living quarter. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

Income Levels - Income categories are defined with respect to the area or county median income and are adjusted for household size, as follows:

Very Low Income - Less than 50% of the area or county median income.

Other Lower Income - Between 51% and 80% of the county median income.

Lower Income - Less than or equal to 80% of the county median income (i.e., combination of very low income and other lower income).

Moderate Income - Between 81% and 120% of the county median income.

Above Moderate Income - Above 120% of the county median income.

Mean - The average of a range of numbers.

Median - The mid-point in a range of numbers.

Multi-family Dwelling Unit - A building or portion thereof designed for or occupied by two (2) or more families living independently of each other, including duplexes, triplexes, quadruplexes, apartments, and condominiums.

Overcrowding - Households or occupied housing units with 1.01 or more persons per room.

Single Family Dwelling - A building or buildings designed for or occupied exclusively by one (1) family, excluding a mobilehome. Includes both detached and attached (townhouses) single family units.

Year-round Housing Units - All occupied units plus vacant units intended for year-round use, but excluding vacant units held for seasonal use or migratory labor.

[illegible]

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

1994-1995

CHAPTER III

POPULATION

CHAPTER III

POPULATION

INTRODUCTION

If a city is to effectively establish land use patterns and set policies regarding housing and public facilities and services, it must first have a clear understanding of who lives in the community and how the population has changed and is expected to change in the future. This chapter reviews historical population trends, current demographics, and population projections for the city of Patterson. Much of the information contained in this chapter is taken from the 1980 Census. Because this information is close to ten years old, and because Patterson has grown substantially in recent years, the data presented may not provide an accurate characterization of Patterson's current population. Recent studies performed by the Stanislaus County Economic Development Corporation and for Stanislaus County are also described and information is cited, but these studies do not provide citywide population information for detailed analysis.

HISTORICAL POPULATION GROWTH

Patterson's most dramatic historical population growth has occurred only very recently, with increases of 14.5 percent during 1986 and 17.7 percent during 1987. As Table II-1 shows, these rates far exceeded countywide and statewide growth percentages for the same years. Prior to 1986, Patterson's population had grown steadily, yet modestly.

This dramatic increase in population can be attributed to persons employed in the Bay Area who moved to Patterson for its affordable housing and continue commute to work. A commuter survey performed by SCEDCO published in August 1988 estimates that approximately 14,000 commuters live in Stanislaus County. No estimates for Patterson were made.

Table III-1 and Figure III-1 show how the populations of Patterson, Stanislaus County, and California have grown since 1970.

POPULATION CHARACTERISTICS

Age Distribution

Age structure is a particularly important planning consideration because different age segments of the population require different kinds of services. A younger population will likely demand more opportunities for active recreation, whereas an older population will likely call for more passive recreational facilities. Different age groups also require different consideration when it comes to housing. An older population will generally have less need for the type of large housing units that a population with a large number of residents of child-bearing age will need. Table III-2 shows the age distribution of Patterson's population in 1980.

TABLE III-1

POPULATION GROWTH RATES
Patterson, Stanislaus County, California
1970 to 1988

<u>Year</u>	<u>Patterson</u>		<u>Stanislaus County</u>		<u>California</u>	
	<u>Total</u>	<u>Annual Growth</u>	<u>Total</u>	<u>Annual Growth</u>	<u>Total</u>	<u>Annual Growth</u>
1970	3,189		194,504		19,953,134	
1980	3,908	2.3	265,900	3.7	23,667,902	1.9
1981	4,145	6.1	271,916	2.3	24,212,000	2.3
1982	4,400	6.2	278,989	2.6	24,469,500	1.9
1983	4,411	0.3	286,111	2.6	24,944,700	1.9
1984	4,633	5.0	293,112	2.4	25,415,300	1.7
1985	4,783	3.2	299,996	2.3	25,857,500	1.7
1986	4,973	4.0	308,778	2.9	26,637,000	3.0
1987	5,695	14.5	320,645	3.8	27,292,349	2.5
1988	6,702	17.7	333,199	3.9	28,018,710	2.7

Sources: U.S. Bureau of the Census, 1970 and 1980; California Department of Finance, 1981-1988.

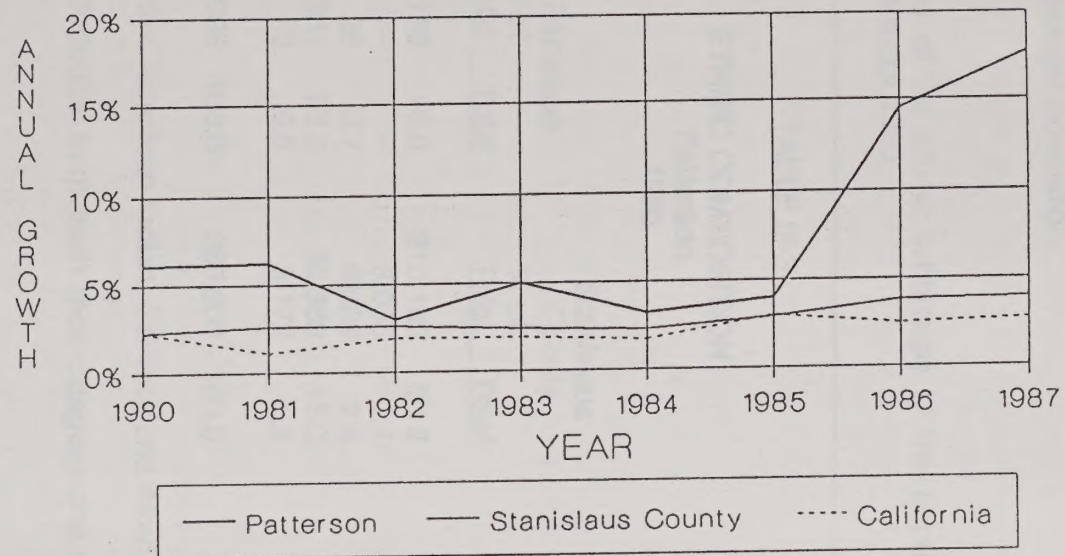
TABLE III-2

AGE DISTRIBUTION
Patterson, Stanislaus County, California
1980

<u>Age Group</u>	<u>Patterson</u>		<u>Stanislaus County</u>		<u>California</u>	
	<u>Total</u>	<u>% of Total</u>	<u>Total</u>	<u>% of Total</u>	<u>Total</u>	<u>% of Total</u>
Under 18	1,366	35.0%	79,264	29.8%	6,388,958	27.0%
18 to 34	1,007	25.8%	78,095	29.4%	7,495,254	31.7%
35 to 59	912	23.3%	68,138	25.6%	6,377,012	26.9%
60 and Over	623	15.9%	40,403	15.2%	3,406,678	14.4%
Total	3,908		265,900		23,667,902	

Source: U.S. Bureau of the Census, 1980

FIGURE III-1
POPULATION GROWTH RATES
Patterson, Stanislaus County



Sources: U.S. Bureau of the Census;
California Department of Finance

Table III-2 shows that the age structure of Patterson differed slightly from those of the county and the state in 1980. The most notable distinction is the significantly higher percentage of residents under 18. Whereas 35.0 percent of Patterson's population was under 18, only 29.8 percent of the county's and 27.0 percent of the state's were. The median age of Patterson residents was, at 27.5, also significantly lower than Stanislaus County's (29.2) and California's (29.9).

According to the commuter survey by SCEDCO, 74 percent of the commuters surveyed were between the ages of 25 and 35. It should be noted that this does not accurately reflect the age breakdown of the commuter households surveyed because the survey did not provide information on the number of children per household. However, it does indicate that Patterson's population is moving toward a younger population.

Racial and Ethnic Composition

Table III-3 shows the breakdown of the ethnic subgroups of the population for Patterson, Stanislaus County, and California as of 1980.

TABLE III-3

ETHNIC COMPOSITION Patterson 1980

Ethnic Group	Patterson		Stanislaus County		California	
	% of Total	Total	% of Total	Total	% of Total	Total
White	1,796	46.0	213,165	80.2	15,763,992	66.6
Black	--	--	3,035	1.1	1,783,810	7.5
Asian ¹	28	0.7	6,639	2.5	1,349,069	5.7
Spanish ²	2,051	52.5	39,889	15.0	4,544,331	19.2
Other	33	0.8	3,172	1.2	226,700	1.0
Total	3,908	100.0	265,900	100.0	23,667,902	100.0

¹Includes Asian and Pacific Islander, American Indian, Eskimo, and Aleut.

²Persons of Spanish origin are deducted from each race category and shown separately as Spanish.

Source: U.S. Bureau of the Census, 1980

As Table III-3 shows, Patterson differed significantly from both the county and the state in 1980. The overwhelming distinction was Patterson's percentage of residents identifying themselves as Spanish, with over half (52.0 percent) of Patterson identified as of Spanish origin, compared with Stanislaus County's 15.0 percent and California's 19.2 percent.

According to the SCEDCO commuter survey, recent population growth from commuters is predominantly white (80 percent). This indicates that Patterson's ethnic composition has probably changed from the 1980 census.

Household and Family Composition

Table III-4 shows a breakdown of family composition according to the 1980 Census for Patterson. As the table indicates, Patterson had a substantially higher percentage (34.5 percent) of married couple families with children than either the county (31.3 percent) or the state (27 percent). The city also had a very low percentage of single female householder without children (0.6 percent) compared with the county (3.0 percent) and the state (3.6 percent).

TABLE III-4
FAMILY COMPOSITION
Patterson
1980

Family Type	Patterson		Stanislaus County		California	
	Total	% of Total	Total	% of Total	Total	% of Total
Married Couple w/Children	429	34.5	30,312	31.3	2,397,163	27.7
Married Couple w/o Children	369	29.7	29,127	30.1	2,435,399	28.2
Single Male w/Children	11	0.9	1,278	1.3	110,153	1.3
Single Male w/o Children	35	2.8	1,433	1.5	152,192	1.8
Single Female w/Children	83	6.7	6,245	6.4	570,701	6.6
Single Female w/o Children	7	0.6	2,911	3.0	312,476	3.6
Non-Family Households	309	24.9	25,536	26.4	2,666,549	30.8
Total	1,243		96,842		8,644,633	

Source: U.S. Bureau of the Census, 1980

Place of Residence

The 1980 Census indicated that the population of the Patterson area was very stable, with a high proportion of long-time residents. In 1980, 69.3 percent of Patterson's residents had lived in the same house for at least five years. In contrast, only 43.2 percent countywide and 44.6 percent statewide lived in the same house that they had lived in five years earlier. Table III-5 shows the residential movement patterns of the local population between 1975 and 1980.

TABLE III-5

RESIDENTIAL PATTERNS
Patterson, Stanislaus County, California
1975 to 1980

<u>Place of Residence</u>	<u>Patterson</u>		<u>Stanislaus</u>		<u>California</u>	
	<u>Total</u>	<u>% of Total</u>	<u>Total</u>	<u>% of Total</u>	<u>Total</u>	<u>% of Total</u>
Same House	2,508	69.3	105,695	43.2	9,797,761	44.6
Different House in Same County	745	20.6	80,756	33.0	6,631,480	30.2
Different County in California	230	6.4	8,6432	15.8	2,651,628	12.1
Different State	51	1.4	12,962	5.3	1,877,289	8.5
Different Country	87	2.4	6,662	2.7	1,021,703	4.6
Total	3,621	100.0	244,718	100.0	21,979,861	100.0

Source: U.S. Bureau of the Census, 1980

The SCEDCO commuter survey respondents indicated that 90 percent had lived in Stanislaus County less than two years. This is directly attributable to the dramatic population growth in Patterson since 1986. The survey focused on newly developed subdivisions, so the conclusion was to be expected.

POPULATION PROJECTIONS

Population projections form the basis for almost all planning activities. Community planning can, therefore, only be as effective as the ability of local officials to anticipate population growth. In the case of Patterson, there has been quite a bit of uncertainty regarding the amount of growth that will take place.

The most recent Stanislaus Area Association of Governments (SAAG) projections (1985) are shown in Table III-6. According to the California Department of Finance's population estimate for January 1988 (6,702), SAAG's projection for the Year 2000 (6,618) has already been surpassed. Another set of projections was prepared in 1986 in conjunction with the *20-Year Development Plan for Del Puerto Hospital*. The Hospital's projections, which cite the City of Patterson Planning Department as a source, are much higher than SAAG's, with an anticipated Year 2000 population of 20,021. Table III-6 compares the Hospital's projections with SAAG's.

TABLE III-6
POPULATION GROWTH PROJECTIONS
Patterson
1990-2010

<u>Year</u>	<u>SAAG</u>	<u>Del Puerto Hospital Plan</u>
1990	5,456	8,138
1995	6,070	12,907
2000	6,618	20,021
2005	7,137	24,871
2010	7,667	

Source: *Stanislaus County Projections*, Stanislaus Area Association of Governments, April 1985; *20-Year Development Plan for Del Puerto Hospital, 1985-2005*, Cattaneo & Stroud, Inc., November 1986.

A comparison of the projections shown in Table III-6 with the actual historical population growth numbers shown in Table III-1 reveals that SAAG's estimates fall far short, whereas the Hospital's have proven to be relatively accurate.

Stanislaus County contracted with Kreines & Kreines to prepare population forecasts for 1988 through 2010, perceiving that both SAAG and Department of Finance (DOF) population projections have failed to adequately account for the surge in population and economic growth in the county. This study makes projections on a countywide basis only; it does not project growth in the individual cities in Stanislaus County. Table III-7 shows the projections for Stanislaus County.

In 1987, Patterson was approximately two percent of the county's total population, but accounted for over four percent of the growth in Stanislaus County. If Patterson were to maintain its capture rate of four percent of new county population, City population would be 7,143 in 1990, 9,183 in 1995, 10,823 in 2000, 12,383 in 2005, 14,023 in 2010, applied to the estimates listed in Table III-7. These estimates appear to be low, as Patterson has already achieved or exceeded the 1990 population as of August 1988.

TABLE III-7

POPULATION PROJECTIONS
Stanislaus County

<u>Year</u>	<u>Population</u>	<u>Five-Year Growth Rate Percentage</u>
Actual:		
1985	304,900	
1986	313,800	
1987	326,800	
Projected:		
1990	363,000	19.1
1995	414,000	14.0
2000	455,000	9.9
2005	494,000	8.6
2010	535,000	8.3

Source: *A Strategic Planning Approach for a County in Change: Population and Economic Forecasts-1988 to 2010*, Prepared for Stanislaus County by Kreines & Kreines, June 1988.

FINDINGS

- Patterson experienced its most dramatic growth in 1986 and 1987, with its population increasing by 14.5 percent during 1986 and by 17.7 percent during 1987.
- Whereas 35.0 percent of Patterson's population was under 18, only 29.8 percent of the county's and 27.0 percent of the state's were. The median age of Patterson residents was, at 27.5, also significantly lower than Stanislaus County's (29.2) and California's (29.9).
- Patterson differed significantly from both the county and the state in 1980 with respect to ethnic populations. The overwhelming distinction was Patterson's percentage of residents identifying themselves as Spanish, with over half (52.0 percent) of Patterson identified as of Spanish origin, compared with Stanislaus County's 15.0 percent and California's 19.2 percent.
- Patterson had a substantially higher percentage (34.5 percent) of married couple families with children in 1980 than either the county (31.3 percent) or the state (27 percent).
- Patterson had a very low percentage of single female householder without children (0.6 percent) compared with the county (3.0 percent) and the state (3.6 percent).
- The 1980 Census indicated that the population of the Patterson area was very stable, with a high proportion of long-time residents.
- There has been quite a bit of uncertainty regarding the amount of growth that will take place in Patterson, with the Stanislaus Area Association of Governments' projection for 2000 having already been surpassed.

BIBLIOGRAPHY

A Strategic Planning Approach for a County in Change: Population and Economic Forecasts, 1988-2010, Prepared for the County of Stanislaus by Kreines & Kreines, June 1988.

California Department of Finance, *Summary Report: Controlled County Population Estimates for Stanislaus County, 1981-1988*

Cattaneo & Stroud, Inc., *20-Year Development Plan for Del Puerto Hospital, 1985-2005*, November 1986.

City of Patterson, *1985 Housing Element*

Stanislaus County County Economic Development Corporation, *Commuter Survey*, August 1988.

Stanislaus Area Association of Governments, *Stanislaus County Projections*, April 1985.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, California.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, Patterson.

U.S. Bureau of the Census, *Summary Tape Files 1 and 3 (STF 1 & 3)*, 1980, Stanislaus County.

CHAPTER IV

ECONOMIC CONDITIONS AND FISCAL CONSIDERATIONS

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

© 2004 by The McGraw-Hill Companies, Inc.

CHAPTER IV

112 *Journal of Management Inquiry*

FISCAL CONSIDERATIONS

CHAPTER IV

ECONOMIC CONDITIONS AND FISCAL CONSIDERATIONS

INTRODUCTION

Long-range city development plans must consider market factors and trends as well as fiscal capabilities of the city. This chapter reviews the general economic and employment characteristics of Patterson, discusses market factors and trends in Patterson, and assesses the City's fiscal capacity to accommodate further development.

ECONOMIC CONDITIONS

The current and future health of a community is dependent on the amount, timing, and location of future development. Local, regional, and national economic and market conditions play an important role in determining the direction of local development.

Economic and Employment Characteristics

According to the 1980 Census, the most recent demographic data, Patterson's economy is based primarily on four industrial groups. Employment trends in Patterson are presented in Table IV-1. The principal industries are: agriculture and related services, educational services, retail trade, and nondurable goods manufacturing. The most important of this group is agriculture and related services. Primary commodities produced are dry beans, green beans, apricots, tomatoes, mixed melons, spinach, and peas.

Since the 1980 Census, the City's population has increased significantly. This growth is attributed to an increased demand for housing by people who are employed in the San Francisco Bay Area and are willing to commute from Patterson because of the city's lower housing costs. The changing demographic structure of the city's population indicates that the composition of major employers has also changed. According to a commuter survey performed by the Stanislaus County Economic Development Corporation (SCEDCO), manufacturing (15 percent), government (14 percent), construction (14 percent), and services (13 percent) were the primary employers of Patterson commuters. The employers named most frequently by the survey respondents were AT&T (5 percent), Lawrence Livermore Laboratory (4 percent), and Sandia Labs (2.5 percent).

Residential Development

Patterson maintained a steady residential growth rate until 1986, when the city experienced an explosive upswing. During that year, the number of single-family housing units increased by 279 units, compared to an increase of 50 units during the 1985 and from 5 to 35 units annually between 1980 and 1984. During 1987, 272 single-family homes were constructed, and in the first five months of 1988, 73 additional units have been approved. Since 1986, the direction of the growth has been toward the east and south.

TABLE IV-1

EMPLOYMENT TRENDS IN PATTERSON

<u>Industry</u>	<u>Number of Employees</u>	<u>Percent</u>
Agricultural	229	16.46
Construction	42	3.02
Nondurable goods manufacturing	186	13.37
Durable goods manufacturing	30	2.16
Transportation	77	5.54
Communications and public utilities	47	3.38
Wholesale trade	50	3.59
Retail trade	194	13.95
Finance, insurance, real estate	90	6.47
Business and repair services	45	3.24
Personal, recreation services	68	4.89
Health services	61	4.39
Educational services	208	14.95
Other professional services	38	2.73
Public administration	<u>26</u>	<u>1.86</u>
Total	1,391	100.00
<u>Occupation</u>		
Executive, administrative, managerial	138	9.92
Professional specialty	118	8.48
Technicians and Related support	11	.79
Sales	118	8.48
Administrative support, clerical	181	13.01
Private household		
Protective service		
Service	188	13.52
Farming, forestry, and fishing	222	15.96
Precision production, craft	165	11.86
Machine operators, assemblers, and inspectors	85	6.11
Transportation and material moving	74	5.32
Handlers, equipment cleaners	<u>91</u>	<u>6.55</u>
Total	1,391	100.00

Source: U.S. Bureau of the Census, 1980

Patterson is located 80 miles from San Francisco via Interstates 5 and 580, and 55 miles southeast of Livermore. A large number of jobs are being created in these areas. Much of Patterson's recent residential growth can be attributed to its ability to attract Bay Area commuters who cannot afford similar but higher priced housing close to their places of employment.

Currently, there are only 15 to 18 acres available for residential development within the city limits which are not committed as approved subdivisions. A few, scattered individual parcels suitable for small projects also are available. If the city is going to continue its residential growth, additional land will need to be annexed.

Commercial Development

Commercial development in Patterson has focused on fulfilling the needs of local residents. Historically, Patterson has not been a commercial center. Traditionally, the population in Patterson has not been large enough to support specialty stores in town. Patterson experiences substantial commercial sales "leakage" to Modesto and other larger towns where selection is better and where prices are more competitive. Purchases of convenience store items occur primarily in town because it saves shopping time. Similarly, many services are purchased locally.

An analysis of employment trends in Patterson shows that the local business and job market has been moving from a retail to a service orientation. The only businesses to close in Patterson recently are a shoe store and a department store; these kinds of establishments typically must rely on a market of a critical size to remain solvent.

Taxable retail sales for Patterson from 1983 to 1986 are presented in Table IV-2. Retail stores include businesses and personal service shops; most grocery store food sales are not included because their sales are generally not taxable. "Other outlets" are defined as manufacturers and wholesalers, construction contractors, and part-time operators.

Taxable sales by Patterson's businesses increased from approximately \$15.1 million in 1983 to approximately \$17.9 million in 1984. In 1985, retail sales increased to \$21.5 million. However, retail sales in 1986 showed a decline to \$19.2 million.

Much of the increase in retail sales can be attributed to the rising population. Table IV-3 shows per capita sales in Patterson during the years 1983 to 1986. Per capita retail sales increased from \$3,430 in 1983 to \$3,860 in 1984. Per capita sales in 1985 increased to \$4,490. During 1986, per capita retail sales returned to the 1984 level of \$3,860.

Within the Patterson city limits there are approximately 9.75 acres of vacant land zoned for commercial uses.

TABLE IV-2
TAXABLE SALES IN PATTERSON

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
<u>Taxable Transactions</u>				
Retail Stores	\$15,136,000	\$17,873,000	\$21,471,000	\$19,198,000
Other Outlets	<u>6,977,000</u>	<u>8,093,000</u>	<u>7,917,000</u>	<u>7,656,000</u>
Total	\$22,113,000	\$25,966,000	\$29,388,000	\$26,854,000
<u>Permits</u>				
Retail Stores	62	59	56	54
Other Outlets	<u>43</u>	<u>49</u>	<u>49</u>	<u>58</u>
Total	105	108	105	112

Source: State Board of Equalization

TABLE IV-3
TAXABLE SALES IN PATTERSON PER CAPITA

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
<u>Taxable Transactions</u>				
Retail Stores	\$3,430	\$3,860	\$4,490	\$3,860
Other Outlets	<u>1,580</u>	<u>1,750</u>	<u>1,660</u>	<u>1,540</u>
Total	\$5,010	\$5,610	\$6,150	\$5,400

Sources: State Board of Equalization and California Department of Finance

Industrial Development

As shown in Table IV-4, Patterson Frozen Foods, with 750 employees, is Patterson's major employer. Other large employers include Design Mobile Systems, which employs 75 people, and Office Space Incorporated, which employs 41 people.

TABLE IV-4
MAJOR EMPLOYERS IN PATTERSON

<u>Manufacturing Employers</u>	<u>Employment</u>	<u>Product</u>
Patterson Frozen Foods	750	Frozen Vegetables (+ 150 During Season)
Design Mobile Systems	75	Modular Buildings
Office Space Incorporated	41	Commercial Mobile Offices
Composite Products, Inc.	25	Agriculture Implements
Hancor, Inc.	20	Plastic Pipe
McCormick Spice Farms	10	Spices (+ 15 During Season)
<u>Non-Manufacturing Employers</u>	<u>Employment</u>	<u>Type of Business</u>
Patterson Unified School District	214	Education
Del Puerto Hospital	94	Hospital
City of Patterson	48	Government

Source: Stanislaus County Economic Development Corporation, 1987.

Patterson's industrial area currently comprises approximately 121 acres. Within the city limits, 37 acres are vacant and zoned for industrial development. These parcels range from 1 to 11.6 acres. An 11.6-acre site is within a flood plain and thus could face additional development costs.

In 1988, the City commissioned a Target Industry Identification Report by Economic Development Services (EDS), using funds from a State Rural Renaissance Grant. EDS analyzed over 550 industries to determine their potential as marketing targets for Patterson. The report identified the following manufacturing, office/clerical/ and distribution industries as the most promising targets for the city.

Manufacturing

- Electronic Computing Equipment
- Biological Products
- Fabricated Metal Products
- Electronic Components

Office/Clerical

- Data Processing Services
- Fire, Marine and Casualty Insurance
- Life Insurance
- Accident and Health Insurance
- Miscellaneous Business Credit Institutions
- Research and Development Laboratories

Distribution

- Industrial Machinery and Equipment
- Groceries and Related Products
- Chemicals and Allied Products
- Industrial Supplies
- Construction Materials
- Drugs, Proprietaries, and Sundries

Prior to initiating the targeted industry screening process, EDS prepared a comparative rating of Patterson's locational strengths and weaknesses relative to competing communities. Communities chosen as a representative cross-section of alternative locations for industry included Fairfield, Fresno, Hollister, Madera, Merced, Modesto, Napa, San Jose, Stockton, and Visalia.

Patterson's primary advantages compared to these communities were: entry-level and semi-skilled wage rates and labor availability, industrial land prices, distribution and transportation services, proximity to markets and suppliers, cost of housing, and community environment. Relative disadvantages were land/site available and lack of incentives.

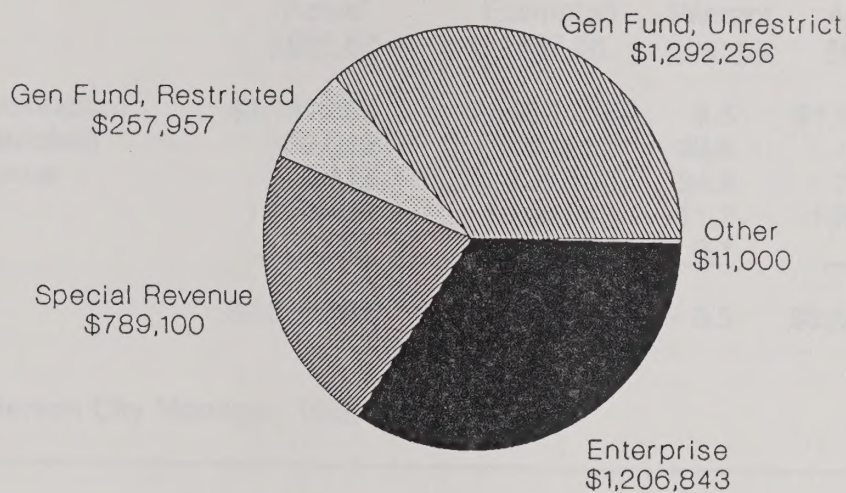
FISCAL SETTING

The City of Patterson provides a variety of services to local residents and businesses, including legislative and administrative services, police and fire protection, water and sewer services, refuse collection, street maintenance, and parks and recreational services.

The City finances these services through the operating budget's four separate funds, as shown Table IV-5 and discussed in greater detail in the following sections. Budget allocation by fund is illustrated in Figure IV-1. In addition to the operating budget, the City has two additional funds called the Park Land Sales & Purchase Interest and the Water Deposit Trust Fund. In Table IV-5, these funds are combined into a category called Other. These budgets are funded through specially dedicated funds which would only be affected indirectly by the general plan update and thus are not discussed further in this chapter.

Figure IV-1

BUDGET ALLOCATION BY FUND City of Patterson Fiscal Year 1987-88



Source: City of Patterson
Budget for Fiscal Year 1987-88

The base year for the information in this chapter is 1988. This report focuses on the City's budgets for fiscal year (FY) 1987-88. FY 1986-87 data and projections for the FY 1988-89 have been included for comparison purposes.

TABLE IV-5
PATTERSON OPERATING BUDGETS BY FUND

<u>Fund</u>	<u>Actual 1986-87</u>	<u>Estimated 1987-88</u>	<u>Percent Change</u>	<u>Adopted 1988-89</u>	<u>Percent Change</u>
General (Unrestricted)	\$1,191,567	\$1,292,256	8.5	\$1,374,784	6.4
General (Restricted)	193,313	257,957	33.4	167,533	-35.1
Special Revenue	585,413	789,100	34.8	718,000	-9.0
Enterprise	1,358,406	1,206,843	-11.2	1,246,300	3.3
Other	<u>10,991</u>	<u>11,000</u>	<u>0.1</u>	<u>9,000</u>	<u>-18.2</u>
Total	\$3,339,690	\$3,557,156	6.5	\$3,515,617	-1.2

Source: Patterson City Manager, 1988.

Operating Budget

The City finances its ongoing operations and services through the operating budget. The operating budget is divided into four categories: the Unrestricted General Fund, the Restricted General Fund, the Special Revenue Fund, and the Enterprise Fund. The fiscal year budgets for 1986-87; 1987-88, and 1988-89 are shown in Table IV-5. With the exception of the Unrestricted General Fund, the funds are discussed in the following paragraphs. The Unrestricted General fund finances the City's ongoing operations and would be most affected most by the general plan update; consequently, it is discussed in greater detail later in this chapter.

- General Fund (Restricted)

This fund is used for acquisition and development of parks and for operation of recreation activities. Monies for recreation are generated primarily through fundraisers and by user fees and charges. Acquisition money comes primarily from developers who, under the Quimby Act, donate money for the City to acquire parklands. Funds are transferred from the Unrestricted General Fund to pay for one-half of the salary of the Recreation Director.

The budget grew by 33.4 percent from FY 1986-87 to FY 1987-88, primarily because of an increase in revenue from developer contributions to park acquisition. The operations side of the Restricted General Fund can be expected to undergo additional pressure as residential development occurs and as the demand for park and recreation services increases.

- Special Revenue Funds

This fund is used for capital improvement projects or for expenditures on streets and highways. The revenues come primarily from developers as facilities fees, or the storm drain fund, and from the state as gas tax or other revenues dedicated to streets and highways.

The budget grew by 34.8 percent from FY 1986-87 to FY 1987-88. The rising revenues can be attributed to larger developer contributions to the storm drain fund and to a growth of the City's population, which increased the City's share of revenues from the state.

- Enterprise Funds

These funds are self-supporting and finance water, sewer, and refuse collection projects. The revenues are generated by user charges and connection fees. Increases in capital costs or operational costs are usually offset through consumer adjustment charges or by increasing the connection fees.

The budget declined by 11.2 percent from FY 1986-87 to FY 1987-88. A decrease occurred because less development took place and fewer fees were collected.

General Fund

The General Fund finances a variety of departments and services, including legislative and administrative functions, police and fire protection, public works, and parks and recreation. The General Fund finances park and recreational needs by transferring funds to the Restricted General Fund.

General Fund revenues are derived from several sources, including state tax revenue allocations, local taxes, and service fees. Patterson's General Fund budget was approximately \$1.3 million in FY 1987-88, an increase of 8.5 percent in the FY 1986-87 General Fund.

General Fund allocations by department are shown in Table IV-6. Although 8.5 percent appears to be a healthy increase in revenues, it is important to note that Patterson's population also increased rapidly from 1986 to 1988. According to the California Department of Finance, Patterson's population increased from 4,973 persons in 1986 to 5,695 in 1987, representing an increase of 14.5 percent. In January 1988, the population was estimated to be 6,702, an increase of 17.7 percent since 1987. The City's revenues have been rising at a slower rate than the City's population.

General Fund Expenditures

General Government

Departments funded through general government revenues include the City council, City administration, City treasurer, City attorney, building maintenance, planning and building inspection, and City clerk. As shown in Table IV-6, the general government allocations for FY 1987-88 totaled \$261,090, or 16.5 percent of the total General Fund budget. This is a 14.9-percent increase over the previous fiscal year. Most of this increase can be attributed to increases in the budget of the planning, building inspection, and the building maintenance departments.

Nondepartmental

These revenues fund expenditures needed for City growth and maintenance that do not fall into other categories. These expenditures include City membership dues for various organizations, miscellaneous equipment, utilities payments and expenses in general. During FY 1987-88, allocations for this category totaled \$119,357, or 7.5 percent of the total budget. This represents a 37.2-percent decline from the previous fiscal year.

Police Protection Services

Patterson's police protection services allocations totaled \$586,725 of the FY 1987-88 budget. At 37.1 percent, this expenditure category is the largest of the General Fund. Allocations for the police department increased 9.1 percent from the previous year. The City Manager feels that the City will have to expand police services available to Patterson residents.

Fire

Allocations for the fire department totaled \$102,940 during the 1987/88 fiscal year: this is 6.5 percent of the budget, and represents a 5.1 percent increase from the previous fiscal year. The capital improvement plan reveals that the City plans to build a new fire station during FY 89-90 using development fees; this expansion will also increase the operating expenditures for this department.

Engineering

Engineering services funded by the General Fund include various professional and technical engineering services. This account also receives funds from sources other than the General Fund. The total allocation for this department during FY 1987-88 was estimated to be \$104,000, which is 6.6 percent of the total General Fund expenditures, and represents a 5.0 percent increase from the previous fiscal year.

Streets

Services funded through the streets account include street maintenance and repairs, tree replacements and care, and street lights. While not funded completely with the General Fund, expenditures were \$288,114 during FY 1987-88. At 18.2 percent, the streets account represent the second highest expenditure category in the General Fund. The allocation grew by 5.2-percent from the previous fiscal year.

Recreation

The General Fund transfers money to recreation accounts to help finance park and recreational activities. The total allocations to parks and recreation from the General Fund were \$119,535 during FY 1987-88. This represents 7.5 percent of the total allocations, and is a 25.7-percent decline from the previous fiscal year.

TABLE IV-6

SUMMARY OF APPROPRIATIONS
Fiscal Years 1986-87, 87-88, and 88-89

<u>Operating Expenditures</u>	<u>Actual 1986-87</u>	<u>Estimated 1987-88</u>	<u>Percent Change</u>	<u>Percent of Total Alloca- tion</u>	<u>Adopted 1988-89</u>	<u>Percent Change</u>	<u>Percent of Total Alloca- tion</u>
City Council	\$ 5,510	\$ 2,750	-50.1	0.2	\$ 2,750	0.0	0.2
Administration	60,749	72,351	19.6	4.6	69,130	-4.5	4.1
City Treasurer	173	174	0.6	0.0	174	0.0	0.0
City Attorney	28,794	28,994	0.1	1.8	28,830	-0.6	1.7
Building Maintenance	27,708	38,088	37.5	2.4	36,742	-3.5	2.2
Planning/Building Inspection	63,171	82,218	30.2	5.2	90,989	10.7	5.4
City Clerk	41,158	36,515	-11.3	2.3	42,681	16.9	2.5
Nondepartmental	190,103	119,357	-37.2	7.5	111,658	-6.5	6.6
Police	538,030	586,725	9.1	37.1	663,571	13.1	39.5
Fire	97,954	102,940	5.1	6.5	107,446	4.4	6.4
Engineering*	99,050	104,000	5.0	6.6	115,056	10.6	6.9
Streets*	273,904	288,114	5.2	18.2	288,380	0.1	17.2
Recreation Commission	65,887	76,272	15.8	4.8	74,330	-2.5	4.4
Parks and Recreation	<u>95,088</u>	<u>43,263</u>	-54.5	<u>2.7</u>	<u>47,459</u>	9.7	<u>2.8</u>
Total	\$1,587,189	\$1,581,761		100.0	\$1,679,196		100.0

* Some revenue for these operations is generated from other funds

Source: Patterson City Manager, 1988.

General Fund Revenues

Sources of general fund revenues are presented in Table IV-7 and illustrated in Figure IV-2.

Property Taxes

As shown Table IV-7, revenues from property taxes were estimated to total \$244,962 during FY 1987-88. This represents 19.0 percent of the City's total revenues, and is an increase of 14.4 percent from the previous fiscal year.

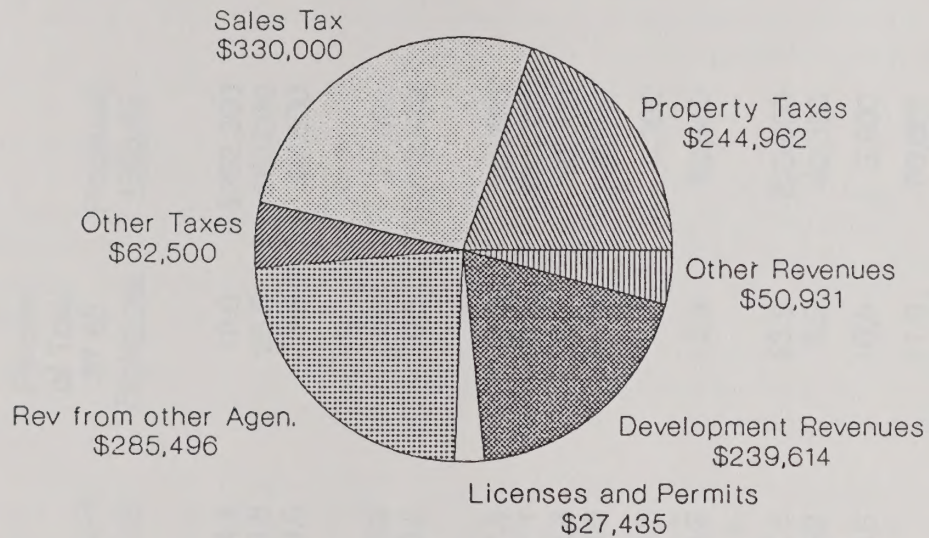
Property taxes are levied on the basis of 1 percent of property assessment values. The City of Patterson receives approximately 7.5 percent of this assessed value. The growth of property tax revenues is largely dependent on new development and how extensively existing property is resold. Proposition 13 limited increases in the assessed valuations of property to 2 percent per annum for property that does not change ownership. Historically, the housing turnover rate in Patterson has been relatively low, so that the increase in property tax revenue is due primarily to new development.

Figure IV-2

GENERAL FUND REVENUE SOURCES

City of Patterson

Fiscal Year 1987-88



Source: City of Patterson
Budget for Fiscal Year 1987-88

TABLE IV-7

ESTIMATED PATTERSON GENERAL FUND OPERATING REVENUES

		Actual	Estimated	Percent	Percent	Proposed	Percent	Percent
		1986-87	1987-88	Change	of Total 87-88 Revenues	1988-89	Change	of Total 88-89 Revenues
Revenue Source								
Taxes								
Property Taxes		\$214,155	\$244,962	14.4	19.0	\$262,300	7.1	19.5
Sales Tax		290,037	330,000	13.8	25.5	360,000	9.1	26.8
Other Taxes		57,342	62,500	9.0	4.8	67,500	8.0	5.0
Licenses and Permits								
Business License		19,855	21,000	5.8	1.6	21,000	0.0	1.6
Other Permits and Licenses		2,213	6,435	190.8	0.5	3,879	-39.7	0.3
Revenue from Development								
Development Improvements		74,000	16,614	-77.5	1.3	41,750	151.3	3.1
Construction Permits		79,034	140,000	77.1	10.8	130,000	-7.1	9.7
Engineering Fees		67,238	65,000	-3.3	5.0	50,000	-23.1	3.7
Other Revenues		53,804	18,000	-66.5	1.4	40,600	125.6	3.0
Fines, Forfeits, and Penalties		3,193	5,000	56.6	0.4	5,300	6.0	0.4
Use of Money and Property		82,813	49,511	-40.2	3.8	50,500	2.0	3.8
Revenue from Other Agencies								
Motor Vehicle in Lieu Tax		153,217	180,000	17.5	13.9	200,000	11.1	14.9
Other Revenues		42,904	105,496	145.9	8.2	40,355	-61.7	3.0
Charges for Current Services		22,874	6,900	-69.8	0.5	6,900	0.0	0.5
Drainage and Lighting District			13,500		1.0	35,000	159.3	2.6
Other Revenues		<u>28,888</u>	<u>27,338</u>	<u>-5.4</u>	<u>2.1</u>	<u>29,700</u>	<u>8.6</u>	<u>2.2</u>
Total		\$1,191,567	\$1,292,256	8.5	100.0	\$1,344,784	4.1	100.0

Source: City of Patterson, Office of the City Manager

Sales Tax

Sales tax revenue represents the City's largest source of income. Revenues from the sales tax accounted for \$330,000 in the FY 1987-88 budget, representing 25.5 percent of the total General Fund revenues. This allocation represents an increase of 13.8 percent over previous years.

Other Taxes

Other tax revenue sources in the General Fund include a franchise tax on utilities (\$60,000, 8.8 percent), and other general taxes (\$2,500, 0.2 percent). Revenues from these sources increased 8.8 percent and 14.9 percent, respectively, from FY 1986-87.

Licenses and Permits

Revenues from business licenses were estimated to be \$21,000 in FY 1987-88. This represents 1.6 percent of the total General Fund revenues, and marks a 5.8 percent increase from the previous fiscal year's revenue. Other permits and licenses, which include fees from animal licenses, trailer park permits, and other licenses and permits, supplied \$6,435 in revenue to the General Fund. This revenue source increased by 191 percent from the previous fiscal year, and it represents 0.5 percent of the total revenues.

Revenue from Development

Revenues from development include development improvements, construction permits, engineering fees, and other revenues. These revenues are paid directly to the City by developers. The revenues totaled \$239,614 and represented 18.5 percent of the total General Fund revenues. In FY 1987-88, revenues from development declined by 12.6 percent from FY 1986-87.

Fines, Forfeits, and Penalties

Revenues from fines, forfeits, and penalties totaled \$5,000, and comprised 0.4 percent of the City's General Fund revenue. Revenues from this source increased by 56.6 percent from FY 1986-87.

Use of Money and Property

Revenues from this source are generated by interest income, rent, and sale of property. In FY 1987-88, revenues from the uses of money and property totaled \$49,511 which is 3.8 percent of the total General Fund revenues; this amount is 40.2 percent less than from the previous year. The decline is primarily attributable to falling City reserves resulting in less interest income.

Revenue from Other Agencies

General Fund revenues from other agencies include the motor vehicle in-lieu tax, which is generated by the state's vehicle license fees and is distributed to cities according to population. Revenue from this source totaled \$180,000, representing 13.9 per cent of the total revenues. This amount represents an increase of 17.5 per cent from previous years. Other revenues from other agencies include the cigarette tax, and reimbursements for police training, among others.

Revenues from these other sources increased by 145.9 percent to \$105,496. Most of this rise can be attributed to state grants that are awarded on a competitive basis and that cannot be considered a yearly revenue source. The revenue from other sources contributed 8.1 percent to the total General Fund revenues.

Charges for Current Services

Charges for current services (accident reports, street, sidewalk, and curb repair, special police and fire, and animal shelter fees) contributed \$5,900 to the General Fund for FY 1987-88; this amount represents 0.2 percent of the total General Fund revenues. This revenue source declined 74 percent from the previous fiscal year because unusually large revenues were earmarked the previous year for sidewalk and street repairs.

Drainage and Lighting District

This fund represents a special assessment district created during FY 1987-88. Revenues from this source totaled \$13,500, and contributed 1.0 percent to total revenues.

Other Revenues

Other revenues include miscellaneous and unanticipated revenue sources (such as donations). These revenues totaled \$27,238 during FY 1987-88, and contributed 2.0 percent to the total General Fund revenues.

FINDINGS

- Patterson's employment is based primarily on agriculture and related services, followed by educational services, retail trade, and nondurable goods manufacturing, based on 1980 census information.
- Much of the increase in Patterson's retail sales from 1983 to 1986 can be attributed to its increased population. Taxable sales per capita has fluctuated, rising in 1984 and 1985, and then decreasing in 1986.
- Due to its size and proximity to Modesto and other larger cities, Patterson experiences "leakage" of retail sales and related sales tax revenues to other cities. Purchases of convenience items and services by Patterson residents are provided primarily by local businesses.
- While residential development and the accompanying population growth generates property tax revenues and increased retail sales within the community, these gains are usually more than offset by the increased cost of police and other government services.
- The largest General Fund appropriation category is police, comprising 39.5 percent of the total general fund in the Proposed FY 1988-89 budget. Other major items include: streets (17.2 percent); engineering (6.9 percent); nondepartmental (6.6 percent); and fire (6.4 percent).
- Sales taxes are the City's largest source of revenues, making up about 26.8 percent of the General Fund revenues. Other major revenue sources include: property taxes (19.5 percent); motor vehicle in lieu tax (14.9 percent); and construction permits (9.7 percent).

BIBLIOGRAPHY

- California State Board of Equalization, *Taxable Sales in California (Sales and Use Tax)*, 1983-1987.
- City of Patterson, *1987/88 Proposed Budget*, 1987.
- City of Patterson, *1988/89 Proposed Budget*, 1988.
- City of Patterson, *Housing Element*, 1985.
- The Gateway*, A Patterson Township Historical Society Bulletin, Volume 1, Number 1, June 1978.
- Patterson-Westley Chamber of Commerce, *Community Economic Profile for Patterson*, 1988.
- Stanislaus County, *General Plan Support Documents*, 1987.
- Stanislaus County Economic Development Corporation (SCEDCO), *Patterson Community Assessment*, 1987.
- Stanislaus County Economic Development Corporation (SCEDCO), *Commuter Survey*, August 1988.
- Target Industry Identification Report*, Prepared for City of Patterson by Economic Development Services, July 1988.

PERSONS CONSULTED

Bruch, Harter, Acting Planning Director, City of Patterson

Nachbar, John, City Manager, City of Patterson

Schell, Wayne, President, Economic Development Services

[illegible]

It is both raised and covered by the water of highway, canal, river, and the sea. The water is raised and covered by the water of highway, canal, river, and the sea. The water is raised and covered by the water of highway, canal, river, and the sea.

© 1999 by John Wiley & Sons, Inc. All rights reserved. This journal is registered at the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923. Organizations in the U.S. who are also registered with the C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of U.S. copyright law) subject to payment to C.C.C. of the per copy fee of \$0.50. This consent does not extend to multiple copying for promotional or commercial purposes. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from John Wiley & Sons, Inc.

LIFE AND WORK SYSTEMS

1994

Copyright © 2001 John Wiley & Sons, Inc.

CHAPTER V

TRANSPORTATION AND CIRCULATION

CHAPTER V

TRANSPORTATION AND CIRCULATION

TABLE 1. *Continued*

CHAPTER V

TRANSPORTATION AND CIRCULATION

INTRODUCTION

A city is both defined and constrained by the network of highways, roads, streets and transit services that move its residents and goods through and in and out of the city. Because of Patterson's size, mobility within the city is still relatively easy.

This chapter discusses Patterson's transportation system and services, including streets and roads, parking, public transit, air service, and rail service.

STREET AND ROADWAY SYSTEM

Regional Context

Patterson is located three miles east of Interstate 5, a major north-south transportation route through the Central Valley. I-5 connects with Interstate 580 approximately 15 miles north of Patterson, which provides access for commuters to the East Bay Area cities of Livermore and Dublin. State Route 33 provides north-south access to Westley to the north and Crows Landing to the south. Las Palmas Avenue provides the easterly connection to Modesto and Turlock via a bridge over the San Joaquin River.

Physical Constraints on the Street and Road System

Physical constraints on the City's circulation system are the natural and man-made local features that limit existing and future roadway connections and alignments, and thereby constrain the community's access and circulation capacity. The primary physical constraints on the city's circulation are:

- The Southern Pacific Railroad tracks which run parallel to Highway 33. These tracks limit the number of east-west street connections between the portions of the city on either side of the railroad line.
- The various canals and creeks which require bridge structures at each point where roadways cross them.
- Interstate 5 to the west of the city, which has only one interchange to enter or exit Patterson along Sperry Avenue.
- The San Joaquin River to the east, with the Las Palmas bridge as its only crossing to and from Patterson.

Functional Classification of Roadways

The street system which serves a city can be described in hierarchical fashion, relating to the functional classification of the streets and highways.

Patterson's street system can be classified according to four basic functional types of roadways:

- Local Service Roadways provide immediate access to properties, are likely to be discontinuous in alignment, and generally carry very light traffic volumes. Those streets not identified with the other three street classifications described below fall into this functional classification.
- Collector Roadways are fed by local service road-ways, provide local circulation options, provide connections to other roadways, and generally carry light to moderate traffic volumes. Included in this functional classification are the following streets:

Ivy Avenue
 "M" Street
 Walnut Avenue
 Salado Avenue
 "E" Street
 Del Puerto Avenue

Orange Avenue
 Hartley Street
 Locust Avenue
 First Avenue
 Ninth Street
 Las Palmas Avenue (west of Second Street)

- Arterial Roadways are fed by local service and collector roadways, provide intra-city circulation routes and connections to regional roadways, and generally carry relatively heavy traffic volumes. Included in this functional classification are the following streets:

Las Palmas Avenue (east of Second Street)
 Second Street (State Route 33)
 Sperry Avenue
 Ward Avenue

- Freeways are fed by collector and arterial roadways, provide intra-city and inter-city travel, provide connections to other regional highways, and are capable of carrying heavy traffic volumes. Interstate 5 serves this function in the Planning Area.

This hierarchy of streets is a general guide to the classification of streets which make up the circulation system of a city. Often a street serves a dual function, such as providing both arterial and collector service. Therefore, it is sometimes difficult to provide a definitive classification. In addition, the width of a roadway does not always correspond directly to its function in the overall circulation system, though the wider roadways tend to have more regional functions within the circulation system.

The city's existing street system is shown in Figure V-1, discriminated by functional classification as applied by the Consultant Team. The City's Street and Circulation Plan currently shows collectors, major streets, industrial streets, and the Las Palmas parkway facility. The streets listed above are all shown on the Circulation Plan, but the functional classification system used herein combines the major, industrial, and parkway facilities into the single classification of arterial roadways.

Roadway Widths and Physical Characteristics

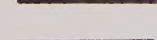
The local service and collector roadways in the original portion of the city (west of Second Street, east of Ninth Street, north of Sperry Avenue, and south of M Street) generally have right-of-way widths of 80 feet, with pavement widths of 52 feet.

Streets which lie outside of the original portion of the city have generally been constructed to the City's cross-section improvement standards for the type of roadway involved (i.e., collector,



Figure V-1

FUNCTIONAL ROADWAY CLASSIFICATIONS

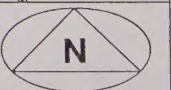
-  Freeway
-  Arterial
-  Collector

All Others Local

Source: Joseph R. Holland, Consulting Traffic Engineer, 1988.



Base Map prepared by Lew Garcia Davis July 1988



Patterson Planning Area

major, industrial, and parkway). Figures V-2 , V-3, and V-4 show the City's current standard street cross sections.

The traffic-carrying capacity of city streets are typically quantified in terms of the ability of the various intersections to accommodate peak-hour traffic volumes. Peak hours are the times of highest traffic flows, which generally occur during morning and evening commute hours. The intersections are the critical "valve" points in the street system, where right of way assignment for conflicting traffic flows is accomplished by intersection controls (e.g., signals or STOP and YIELD signs). Roadway segments with unusual characteristics, such as freeways with multiple interchanges or narrow bridges can also be traffic-limiting points. Roadways with these characteristics are not problems in Patterson.

For planning purposes, it is possible to estimate approximate daily traffic volume levels which are associated with the peak-hour traffic-carrying ability of the various types of streets. The ultimate "capacity" of a street is the maximum level of traffic which a street of a given width (number of lanes) can carry in a specified time period (per hour or per day) without resulting in extreme congestion during the peak traffic loading periods of the day. These maximum flow conditions are generally considered unacceptable, however, and special criteria are therefore used to identify lower traffic volume levels which have better (more free-flowing) peak period traffic conditions. These criteria, called "Level of Service" criteria, generally reflect traffic speeds and the percentage of the roadway's "capacity" used by the traffic.

For urban roadways, the proportion of capacity used, or volume-to-capacity (V/C) ratio, is usually the primary criterion used to characterize the levels of service. Service levels are identified by the alphabetic characters A, B, C, D, E, and F, with A representing the best (most free-flowing) peak period traffic conditions and F representing the worst conditions, with traffic volumes in excess of hourly capacity levels.

Each of these levels has a corresponding V/C ratio. The level of traffic volumes which fill the maximum capacity of a roadway is assumed to have a V/C ratio of 1.00. A roadway operating at maximum capacity of a roadway is typically assumed to be the highest end of Level of Service "E", representative of heavily congested conditions. By definition, a V/C ratio cannot exceed 1.00. Because daily roadway capacities are calculated based on typical peaking characteristics, however, it is not unusual to find such an occurrence.

Level of service definitions can be used to describe traffic operating conditions on both roadway segments and intersections. Table V-1 provides a description of the various levels of service and the V/C ratio associated with each.

TABLE V-1

LEVEL OF SERVICE CRITERIA

<u>Level of Service</u>	<u>V/C Ratio Range</u>	<u>Conditions</u>
A	< 0.61	Minimum delay
B	0.61 - 0.70	Increasing delay with increasing V/C ratio
C	0.71 - 0.80	
D	0.81 - 0.90	
E	0.91 - 1.00	High delay
F	> 1.00	Excessive delay and backups

Source: Joseph R. Holland, Consulting Traffic Engineer, based on "Highway Capacity Manual", 1985.

Traffic conditions up to Levels of Service C or D are frequently considered to be within the range of acceptable congestion or delay for urban communities. In relatively smaller communities, however, there is frequently an aversion to almost any measurable level of delay as being incompatible with the character of the community. Heavier traffic levels and congestion will usually be tolerated for short periods during special occasions or local celebrations, but not on a regular, day-to-day basis. In such cases, it is not unusual for traffic conditions of Levels of Service A or B to be cited as the worst conditions which are acceptable to local motorists.

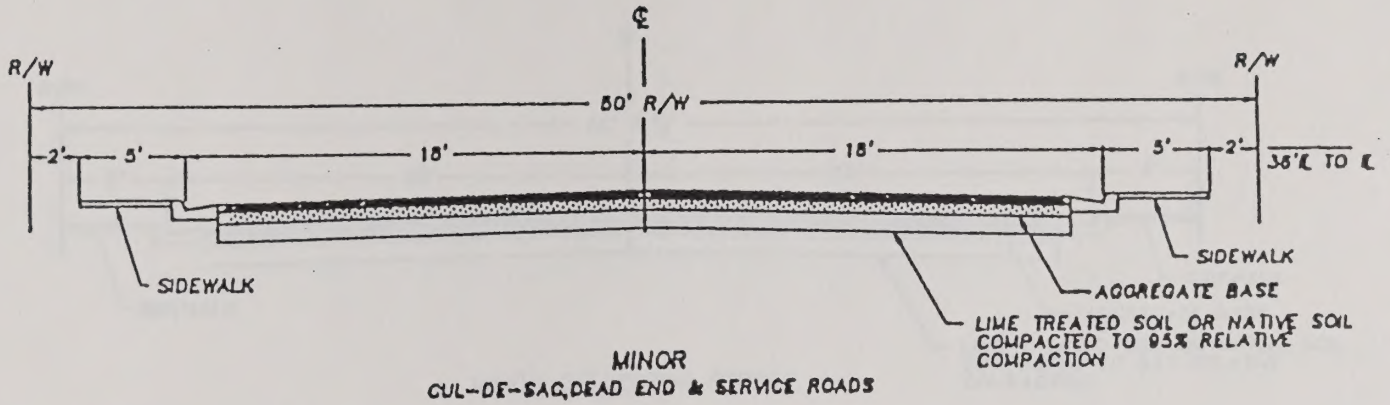
Table V-2 presents daily traffic volume levels associated with Levels of Service A through E for two-lane and four-lane streets. The volumes shown apply to collector or arterial streets when they are considered to be the major streets at intersections with other streets. Even lower volumes apply to streets when they are considered to be the minor streets at intersections.

It should be noted that these are generalized approximations and should be used only as rough guidelines. Many factors associated with particular streets could increase or decrease these values proportionately, such as the width of traffic lanes, the relative amount of cross-traffic at intersections, the presence or absence of curb parking along the street, the presence or absence of left-turning lanes at intersections, etc.

Figure V-2

STREET STANDARDS

Minor Street and Two-Lane Collector



TYPICAL STREET SECTIONS

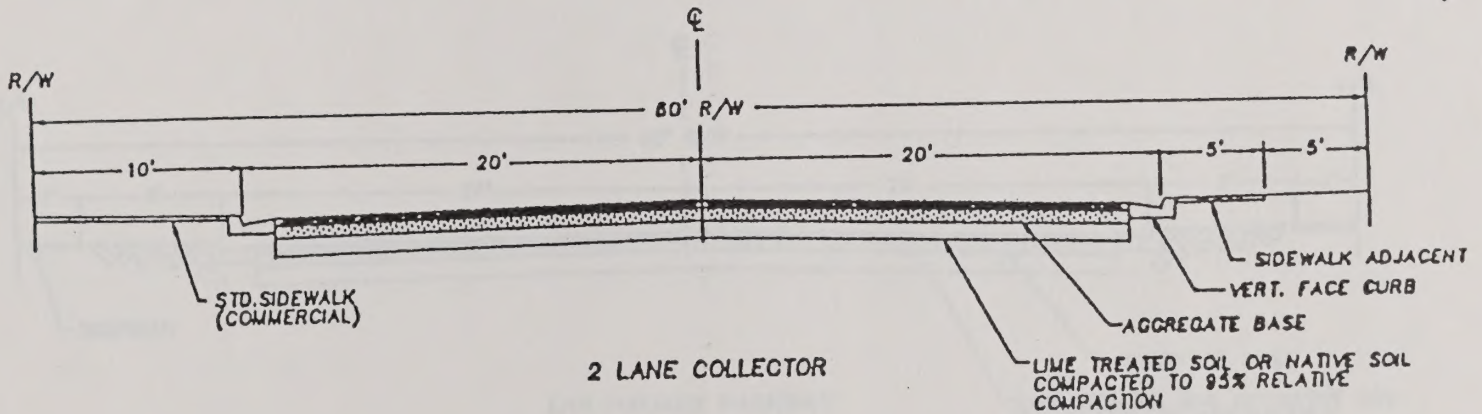
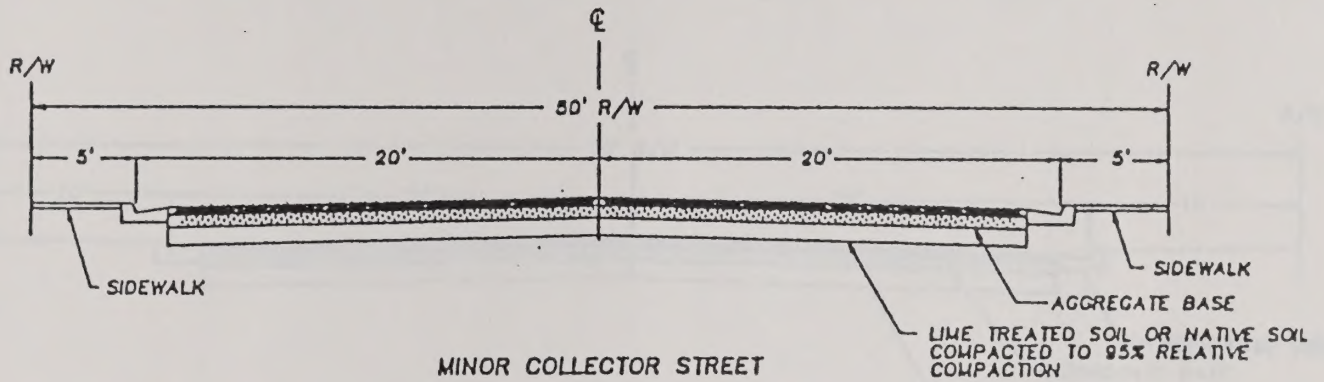


Figure V-3

STREET STANDARDS

Minor Collector Street and Las Palmas Parkway



TYPICAL STREET SECTIONS

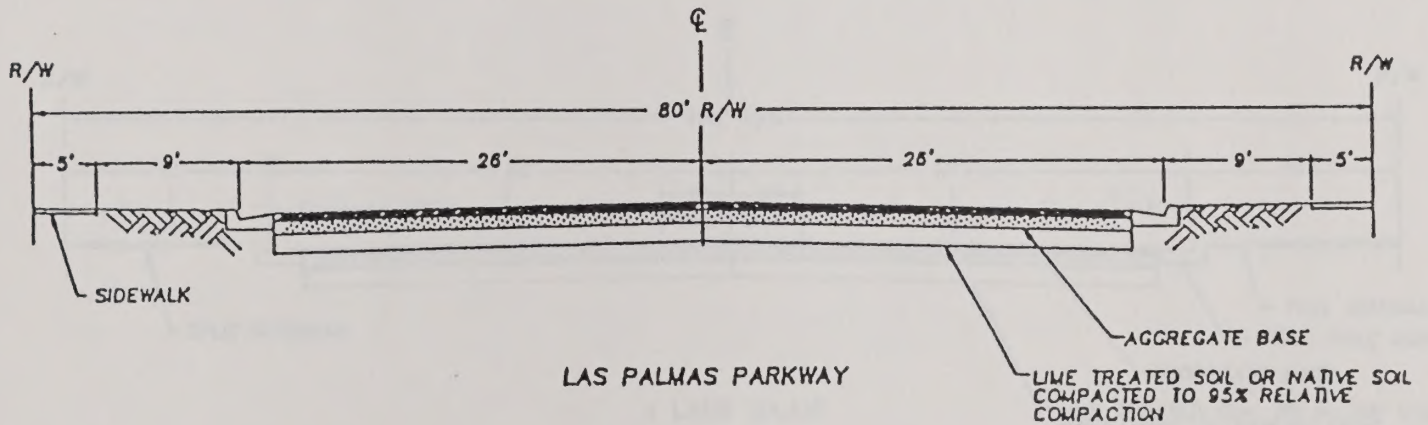
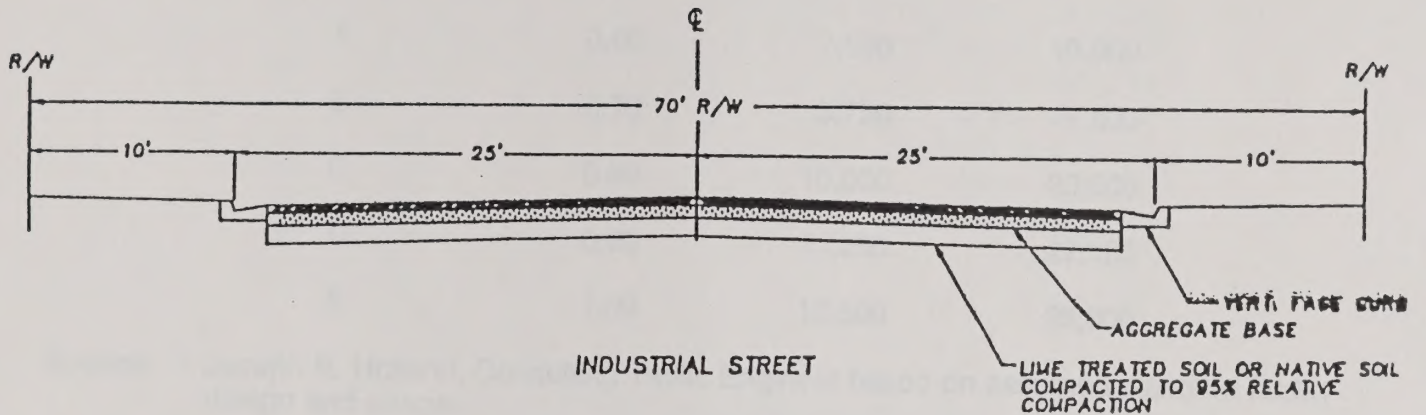


Figure V-4

STREET STANDARDS

Industrial Street and Four-Lane Major Street



TYPICAL STREET SECTIONS

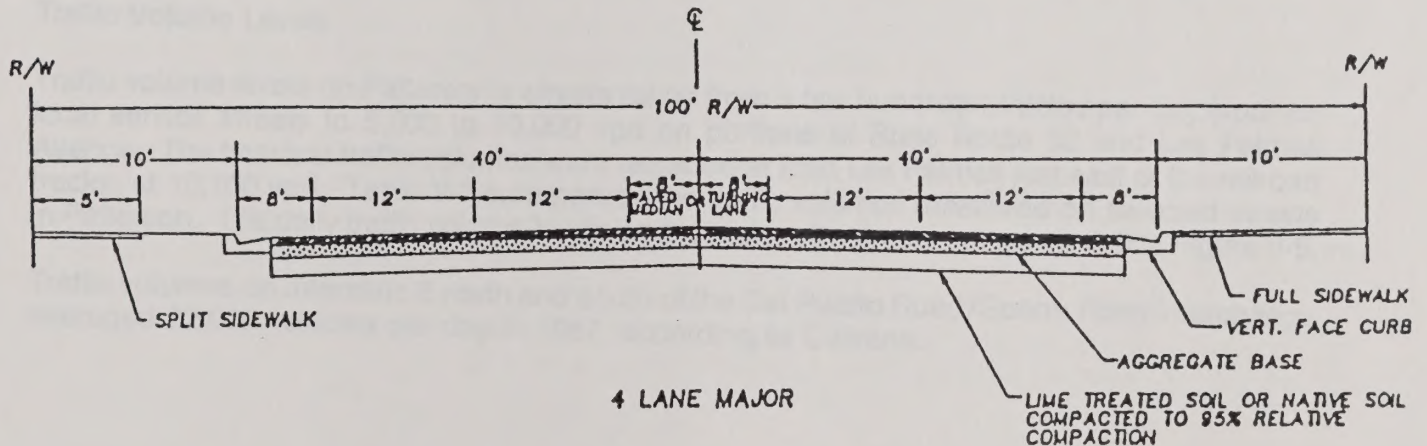


TABLE V-2

MAXIMUM DAILY TRAFFIC VOLUMES
ASSOCIATED WITH EACH LEVEL OF SERVICE

<u>Level of Service</u>	<u>Maximum V/C Ratio</u>	<u>Maximum 2-Way Volume (vpd)</u>	
		<u>Two-lane Street</u>	<u>Four-lane Street</u>
A	0.60	7,500	15,000
B	0.70	8,750	17,500
C	0.80	10,000	20,000
D	0.90	11,250	22,500
E	1.00	12,500	25,000

Source: Joseph R. Holland, Consulting Traffic Engineer based on assumed standard facility design and usage.

Signalized Intersection Controls

There are presently no intersections within the city which are controlled by traffic signals.

Traffic Volume Levels

Traffic volume levels on Patterson's streets range from a few hundred vehicles per day (vpd) on local service streets to 5,000 to 10,000 vpd on portions of State Route 33 and Las Palmas Avenue. The heaviest traffic volumes were recorded at East Las Palmas just east of the railroad tracks, at 10,700 vpd. Table V-3 summarizes the traffic volumes measured on selected streets in Patterson. The daily traffic volume levels on the major city streets are presented in Figure V-5.

Traffic volumes on Interstate 5 north and south of the Del Puerto Road/Sperry Road interchange averaged 22,000 vehicles per day in 1987, according to Caltrans.

TABLE V-3

TRAFFIC VOLUMES ON SELECTED STREETS

<u>Roadway</u>	<u>Traffic Volumes</u> <u>(Vehicles per day)</u>
East Las Palmas Avenue	4,400 - 10,700
West Las Palmas Avenue	200 - 2,150
Second Street (Highway 33)	4,800 - 7,500
First Street	1,750 - 3,800
Salado Avenue	2,500 - 3,300
Del Puerto Avenue	1,800 - 2,500
Sperry Avenue	1,400 - 3,650
Ward Avenue	650 - 2,100
9th Street	550 - 2,100
E Street	100 - 2,200

Source: City of Patterson Police Department, May and June 1988.

Traffic Generation Rates

In this context, a trip is defined as a one-way vehicle movement which either begins or ends within the site of the land use being considered. Daily and peak hour trip rates are shown in Table V-4 for several different land use types. These rates represent the number of "trip ends" (including the arrival end and the departure end of trips) which the given land uses will generate per unit of measure indicated (i.e., per dwelling unit, per acre, or per 1,000 square feet of floor space).

The peak hour trips generated by a given land use are those trips which are likely to occur during the highest one-hour period of traffic activity on the adjacent streets during the afternoon peak period (generally 4 to 6 p.m.) on weekdays. These peak hour trips are included in the daily trip rates for each land use shown. The amount of traffic generated in the peak hour varies somewhat by land use type. Overall, the peak hour volume on a given street is typically about 10 percent of the daily traffic volume carried by the street.

TABLE V-4

TYPICAL TRIP GENERATION RATES

<u>Land Use</u>	<u>Type</u>	<u>Per</u>	<u>Daily Rate (Trip ends)</u>	<u>P.M. Peak Hour Rate (Trip Ends)</u>
Residential	Single family	DU ¹	10.00	1.00
Residential	Multi-family	DU	6.10	0.70
Residential	Mobilehome	DU	4.80	0.59
Office	25% FAR ²	Acre	133.90	24.00
Office	40% FAR	Acre	214.30	38.30
Market		1,000 sf ³	125.50	8.82
Discount Store		1,000 sf	70.10	3.79
Commercial	<50,000 sf	1,000 sf	117.90	14.42
Commercial	50,000-100,000 sf	1,000 sf	82.00	7.80
Commercial	100,000-200,000 sf	1,000 sf	66.70	5.90
Commercial	200,000-300,000 sf	1,000 sf	50.60	4.80
Restaurant	Fast food	1,000 sf	553.00	31.60
Restaurant	Coffee Shop	1,000 sf	164.40	10.50
Restaurant	Quality	1,000 sf	74.90	6.14
Industrial	Light	Acre	52.40	10.10
Industrial	Heavy	Acre	15.60	2.20
Industrial	Warehouse	Acre	56.10	18.80
Motel		Occupied Room	10.05	0.70
Retirement Community		DU	3.03	0.40
Service Station		Pump	133.00	3.60
Convenience Market		1,000 sf	625.00	46.70

¹Dwelling Unit²Floor Area Ratio (Square feet of floor space as percentage of site area)³Square feetSource: *Trip Generation*, Institute of Traffic Engineers, 1982

Traffic Accident Patterns

In calendar year 1987 there were 78 reported traffic collisions within the City of Patterson. This is up slightly from the 73 reported collisions in 1986. In 1985 only 54 traffic collisions were reported. Table V-5 presents a tabulation of the traffic collisions reported in these years by type of collision and by severity (fatality, injury, or property damage only).

These data indicate that while the total number of reported accidents was higher in both 1986 and 1987 than in 1985, the number of collisions did not increase significantly in 1987 over the 1986 total.

Table V-6 presents another tabulation for the same accidents with a break-down of the primary contributing circumstance and the severity. These data indicate that at least 10 percent of the traffic collisions which occurred within the City in 1987 had alcohol or drug impairment as a primary contributing circumstance. For 1987, the largest category of known contributing circumstance involves unsafe starting or backing. The second largest category is unsafe turning.

The six intersections with the highest number of reported traffic collisions at or in the vicinity the intersection in 1987 are presented in Table V-7. As shown, each of these intersections had two or three accidents in 1987. Several other intersections had only one accident during 1987.

TABLE V-5
CITY OF PATTERSON
TYPES OF TRAFFIC COLLISIONS AND SEVERITY

<u>Motor Vehicle versus:</u>	---- 1985 ----		---- 1986 ----		---- 1987 ----	
	Prop. Damage Only	Injury	Prop. Damage Only	Injury	Prop. Damage Only	Fatal or Injury
Pedestrian	-	1	1	2	-	2
Bicycle	-	-	-	1	2	2
Parked Motor Vehicle	7	2	11	3	9	-
Other Motor Vehicle	29	8	26	17	37	12
Fixed Object	4	-	3	2	7	3
Other Object	-	1	2	1	2	1
Non-collision	-	-	2	1	-	1
Other	<u>2</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>-</u>
Subtotals	42	12	45	28	57	21
All accidents	54		73		78	

Source: SWITRS, California Highway Patrol, 1985, 1986, and 1987.

TABLE V-6

**CITY OF PATTERSON TRAFFIC COLLISIONS
CONTRIBUTING CIRCUMSTANCES AND SEVERITY**

<u>Primary Collision</u>	----- 1985 -----		----- 1986 -----		----- 1987 -----	
	<u>Prop. Damage Only</u>	<u>Injury</u>	<u>Prop. Damage Only</u>	<u>Injury</u>	<u>Prop. Damage Only</u>	<u>Fatal or Injury</u>
Alcohol/drugs	1	2	3	3	3	5
Unsafe speed	3	1	6	2	5	7
Following too closely	-	-	-	1	1	-
Wrong side of road	1	-	1	1	1	1
Improper passing	1	-	1	-	3	-
Improper turning	7	-	9	3	12	3
Unsafe lane change	-	-	2	-	1	-
Auto or ped. right-of-way	13	6	8	6	6	3
Other improper driving	1	-	-	2	1	-
Hazardous parking	1	-	-	1	-	-
Unsafe starting or backing	5	-	11	4	19	1
Signals and STOP signs	3	1	-	2	1	1
Other than driver	1	1	1	1	1	-
Equipment (brakes, etc.)	2	1	1	-	2	-
Pedestrian violation	-	-	-	1	-	-
Other	1	-	2	1	1	-
Unknown	2	-	-	-	-	-
Subtotals	42	12	45	28	57	21
All accidents	54		73		78	

Source: SWITRS, California Highway Patrol, 1985, 1986, and 1987

TABLE V-7
CITY OF PATTERSON
HIGHEST TRAFFIC ACCIDENT INTERSECTIONS IN 1987

<u>Intersections</u>	<u>1987 Accidents</u>
Las Palmas Ave & Route 33	3
"E" St & Route 33	3
N. Salado Ave & N. El Circulo	2
"M" St & Route 33	2
Las Palmas & First St	2
Rosemary Dr & Hannah Dr	2

Source: SWITRS, California Highway Patrol, 1987.

Proposed First Street Closure

In June 1988, the City Council rejected a petition by Patterson Frozen Foods Company to close a section of First Street between Las Palmas Avenue and E Street to public traffic. The company, whose operation straddle both sides of First Street, proposed closure because through-traffic mingles with the company's forklifts and electric carts crossing between its eastern and western complexes. Opponents were concerned with the impacts on other streets, particularly Orange Avenue, from diverted traffic.

Plans for Improvements

There are no identified major roadway improvement projects planned by the City, Stanislaus County, or Caltrans within or in the vicinity of the City of Patterson.

Parking

Based on a 1985 inventory, within the downtown area encompassed by El Circulo Avenue, there are a total of 674 parking spaces. Of these, 380 are on-street parking spaces, 60 are located in off-street municipal parking lots, and 234 are located in private off-street parking lots. No recent studies of parking space usage have been prepared.

Construction or major alteration of any buildings or structures are subject to off-street parking standards set forth in the Patterson Zoning Ordinance.

Existing and Potential Problem Areas

Existing daily traffic volumes are, for the most part, within the traffic-carrying capacity of Patterson's streets; however, future new development could result in traffic increases which might produce traffic problems at some locations, depending on the location, amount, and type of land uses involved. In the process of updating the City's General Plan, it will be important to evaluate streets with respect to their ability to accommodate any significant traffic volume increases which may be projected as a result of planned future development.

There are several areas within the city's circulation system which have been identified during the background investigations as having the potential for future traffic problems. These include:

- Traffic operations and safety within the Plaza traffic circle;
- Traffic operations and safety at the numerous five and six way intersections along Salado and Del Puerto Avenues; and
- Traffic operations at several key intersections within the city and the potential need for signalization or other traffic control devices.

Recently, stop signs have been installed at the six way intersections at Salado and Del Puerto Avenues, creating six-way stops in an effort to increase safety at these intersections.

While there appears to be adequate parking supply overall to accommodate the existing parking demand, there are some areas where peak demand levels have resulted in a perception of parking and safety problems. Future development will need to include the provision of enough parking spaces to adequately accommodate its parking demands, so that the existing parking conditions are not aggravated.

PUBLIC TRANSIT

Intercity bus service is provided by Greyhound Bus Lines, with a terminal in Modesto. Stanislaus County Transit provides intercity service within the county, serving Patterson through its West Side Dial-a-Ride. The service is a quasi-private entity subsidized by the cities it serves.

The Senior Opportunity Services Program (SOSP) offers local transportation to the elderly in Patterson. The City dispatches these units which provide door-to-door service. Trips are limited to the area within the city limits.

No taxi service is presently available in Patterson.

AIR SERVICE

Patterson Airport

Patterson Airport is a private airport located on the north side of Sperry Road immediately east of the Delta-Mendota Canal, with services available to the public. The airport includes one 2,500 by 75 foot north-south runway, of which the northern 665 feet is paved.

The airport is an uncontrolled airway with no control tower. It is limited to crop dusting operations.

Crows Landing Auxiliary Naval Landing Field

The Crows Landing Naval Air Station is located about two miles northwest of the town of Crows Landing and about one mile south of the Patterson's southern city limits. Crows Landing functions as an auxiliary landing field for operations from Moffett Field, Lemoore Naval Air Station, Alameda Naval Air Station, Castle Air Force Base, the Air National Guard, and the National Aeronautics and Space Administration (NASA). Crows Landing serves as an important training and testing facility for the air operations of other air stations impacted by their volumes of air traffic or by urban encroachment.

Facilities include two concrete-paved runways in an "X" configuration. Operations and personnel support facilities occupy about 30 acres of the station's total of 1,528 acres.

Operations at Crows Landing are primarily training and air field practice of experienced pilots. Most of the operations occur Monday through Friday during day hours, although the air field occasionally operates weekend and nighttime flights. Most aircraft are light jet or multi-engine jet airplanes. Large planes, such as the Casey 135 Tanker and Weather Reconnaissance aircraft, are flown about six to seven times a year. Annual operations for 1987 were approximately 30,000 to 33,000 take-offs and landings over a 255-day flight year (excludes most weekends and holidays). Crows Landing averages six night operations a year.

Commercial Air Service

Commercial air service is available to residents of the Planning Area via Modesto City-County Airport (Harry Sham Field), approximately 16 miles east of Patterson. Commercial carriers include American Eagle with service to Los Angeles, San Francisco, and Bakersfield, and United Express, with connections to Fresno, San Francisco, and Burbank.

Stockton Airport, about 30 miles northeast of Patterson, provides commercial air service to Denver via Continental Airline, to Fresno, San Francisco, and Burbank via United Express, and to Los Angeles via USAir.

RAIL SERVICE

The Southern Pacific Railroad line runs through Patterson, adjacent to Highway 33. The line runs north to Tracy, with east-west connections, and south to Fresno, with multiple rail connections. Southern Pacific Transportation Company operates freight trains along this line. An average of one to two trains daily pass through Patterson.

An AMTRAK passenger train station is located in Denair, about 20 miles east of Patterson. Trains run twice daily in each direction up and down the San Joaquin Valley. Major destinations include Merced, Fresno, and Bakersfield to the south (with bus connections to Los Angeles from Bakersfield) and Stockton, Antioch, and Martinez, and Oakland to the north, with bus connections in Stockton to Sacramento and San Jose.

FINDINGS

- Patterson's street system has a number of man-made and natural barriers to the orderly and efficient development of a local circulation system. These obstacles include:
 - the difficulty and cost of widening streets in areas of existing development;
 - the limited alternatives for effectively increasing the north-south and east-west traffic-carrying capacity of the street network;
 - the difficulty and cost of making street extensions and connections is a result of barriers, such as the railroad and canals; and
 - the lack of adequate, undeveloped sites for additional public parking facilities in areas of highest existing and future parking demands.
- Existing daily traffic volumes are generally within the traffic-carrying capacity of Patterson's streets. The highest traffic volumes are experienced at East Las Palmas Avenue and Second Street.
- Potential future problems with traffic operations and safety exist at the Plaza traffic circle and the numerous five and six way intersections along Salado and Del Puerto Avenues.
- Public transportation in Patterson is limited to Westside Dial-A-Ride. Intercity bus service is available to Patterson residents by Greyhound, with a station located in Modesto.
- Patterson Airport is a private airport located in the Planning Area which is limited to crop spraying operations. Modesto and Stockton Airports provide the nearest passenger air transportation for Patterson residents. The Crows Landing Naval Auxiliary Field south of Patterson is used for military test and practice flights.
- The Southern Pacific railroad line runs through Patterson. Approximately one to two freight trains pass through Patterson daily. Patterson residents have access to AMTRAK passenger trains from a station in Denair.

BIBLIOGRAPHY

California Department of Transportation, *1987 Traffic Volumes on California State Highways*, 1987.

City of Patterson, *Preliminary General Plan Environmental Impact Report*, 1985.

Highway Capacity Manual, 3rd Edition, (TRB Special Report 209), Transportation Research Board of the National Research Council, 1985.

Statewide Integrated Traffic Records System (SWITRS) Traffic Collision Report for the City of Patterson, California Highway Patrol, 1985, 1986, and 1987.

Trip Generation - Fourth Edition, Institute of Transportation Engineers, 1987.

Stanislaus County, *General Plan Support Documents*, 1987.

Stanislaus County Airport Land Use Commission, *Airport Land Use Commission Plan*, 1978.

Stanislaus County Economic Development Corporation, *Patterson Community Assessment*, May 1987

PERSONS CONSULTED

Kelley, Dan, Lieutenant Commander, Crows Landing Naval Auxiliary Landing Field

Source: California Department of Transportation

Level of Service - An indicator of the quality of service which the user receives on a given street with a particular level of carrying capacity of the street and a given amount of traffic. The level of service is typically defined by a range of values to represent various, designated by the following categories: A, B, C, D, E, and F.

Right-of-Way - The width of publicly-owned streets, including the pavement, sidewalks, and anything else that is subject to public control or ownership.

Service Capacity - The maximum amount of traffic which a street can carry in a given amount of time without creating unsafe or congested conditions. Capacity is usually expressed as "vehicles per hour."

State - Statutory Area Association of Government, a regional planning agency which advances transportation programs and other efforts.

Vehicle to Capacity Ratio - The ratio of the volume of traffic to the capacity of the street. A ratio of 1.0 or less indicates that the street is operating at or below capacity. A ratio greater than 1.0 indicates that the street is operating above capacity.

CHAPTER VI

PUBLIC FACILITIES AND SERVICES

GLOSSARY

ADT - Average daily traffic volumes

Caltrans - California Department of Transportation

Level of Service - An indication of the peak hour traffic conditions which are experienced on a given street with the particular traffic-carrying capacity of the street and a given amount of traffic using the street; this is typically defined by a range of volume to capacity ratios, designated by the alphabetic characters A, B, C, D, E, and F.

Right-of-Way - The width of publicly-dedicated streets, including the pavement, sidewalks, and planting area; the width of publicly-owned property for public projects.

Roadway Capacity - The maximum amount of traffic which a street can carry in a given amount of time without reaching unstable (or forced flow) traffic conditions; usually expressed as "vehicles per hour."

SAAG - Stanislaus Area Association of Governments, a regional planning agency which addresses transportation problems and other issues.

Volume to Capacity Ratio - The ratio of the volume of traffic carried by street to the street's traffic-carrying capacity; used to determine the applicable level of service for a street at a given traffic volume level; abbreviated as V/C.

CHAPTER VI

PUBLIC FACILITIES AND SERVICES

CHAPTER VI

PUBLIC FACILITIES AND SERVICES

INTRODUCTION

City development is dependent on a complicated network of public facilities and services. Each type of service has a unique set of constraints and must adapt to growth and change differently. This chapter focuses primarily on water, sewage collection and treatment, drainage, schools, fire protection, and law enforcement, describing the various systems and their capacities and discussing their implications for the general plan.

Transportation facilities and services are discussed separately in Chapter V and parks and recreational facilities are discussed in Chapter VII.

GENERAL GOVERNMENT

Patterson is a general law city, operating under a council/manager form of government. The City Council includes the Mayor, who is directly elected to a two-year term, and four city council members, who are elected at-large for staggered four-year terms.

The City has created three advisory commissions and committees with specific decisionmaking responsibilities.

- Planning Commission - Five-member body appointed by the City Council which advises the City Council on land use and zoning matters.
- Recreation Commission - Five-member body, appointed jointly by the City Council and Patterson Unified School District, which advises the City Council on the development and operation of park and recreational facilities and on the management of recreation programs.
- Beautification Committee - Eleven-member body appointed by the Mayor which advises the City Council and Planning Commission on horticultural matters, beautification, and the City's tree planting ordinance.

The administration of the City is organized into several departments which are directed by the City Manager: Planning, Recreation, Public Works/Engineering, Utilities, City Clerk, Police, and Fire. The city organizational structure is shown in Figure VI-1. As of June 1988, the City employed a total of 42 full-time personnel, plus a number of part-time and seasonal employees.

City operations are concentrated in two facilities. The fire and police stations operate out of the original city hall building at 344 West Las Palmas Avenue. This building also houses the City Council chambers. The City's administrative offices are located at 33 South Del Puerto Avenue, a temporary leased facility. The City collects a facilities fee on new development for the construction of new city facilities. The City's corporation yard is located on South 4th Street at B Street.

Figure VI-2 shows the location of these and other public and quasi-public facilities.

WATER SERVICE

Domestic Water Supply

The City of Patterson owns and operates the major water system in the Planning Area. The water system provides water service to all residents in the city as well as commercial and industrial users. In addition, Patterson Frozen Foods has its own wells to supply water for its industrial processing. Residences in the unincorporated Planning Area rely on private wells for their water supply.

The City's water system includes five wells and a network of distribution lines consisting of two-inch, four-inch, six-inch, eight-inch, and ten-inch diameter pipes. Figure VI-3 shows the location of the City's wells and main distribution lines. Water from the City's wells is of good quality and meets federal drinking water standards. Table VI-1 shows the production capacity for each of the City's wells.

TABLE VI-1
WELL PRODUCTION CAPACITY

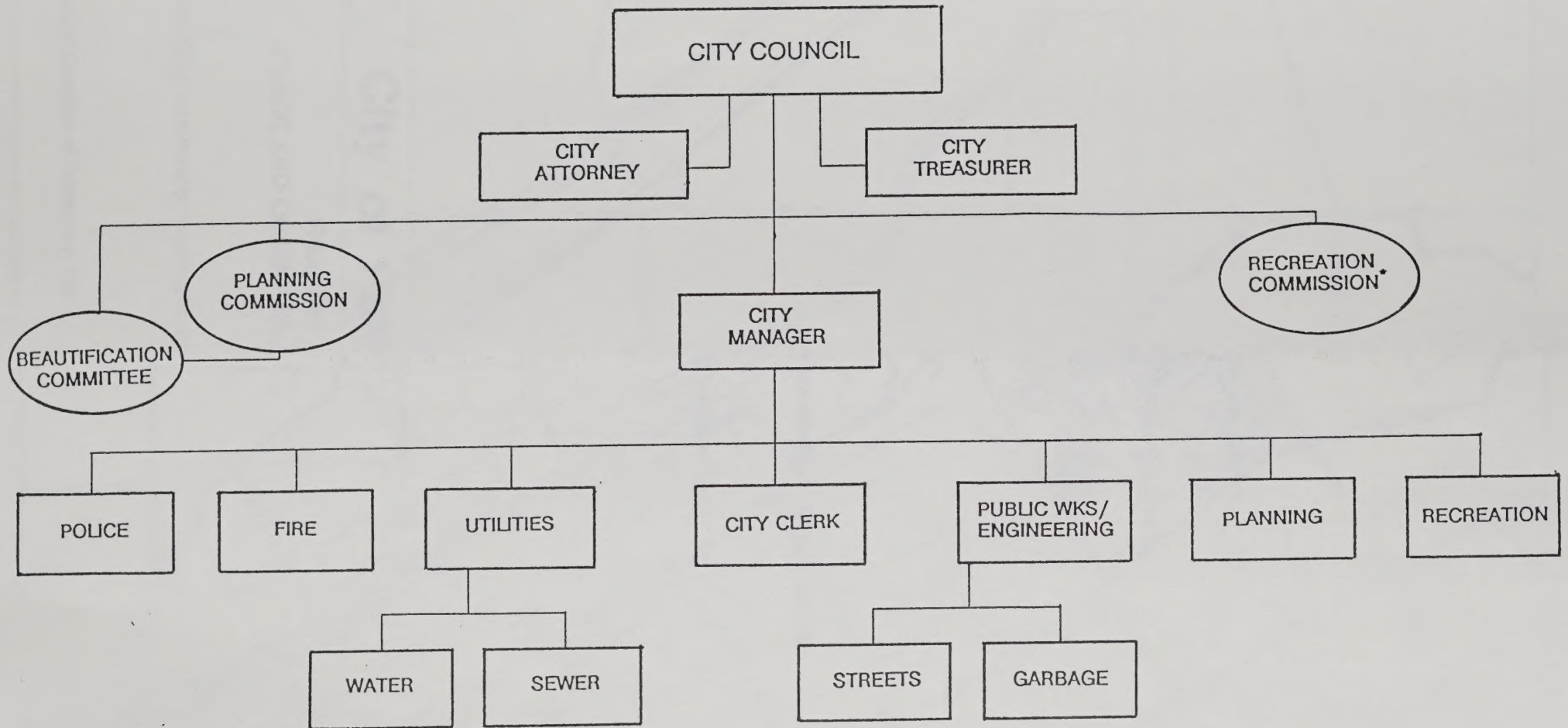
<u>Well No.</u>	<u>Production Capacity (gpm)</u>
1	360
2	770
3	410
4	940
5	<u>2,000</u>
Total	4,480

Sources: *Water System Master Plan*, City of Patterson, 1984, and City of Patterson Public Works Department, 1988.

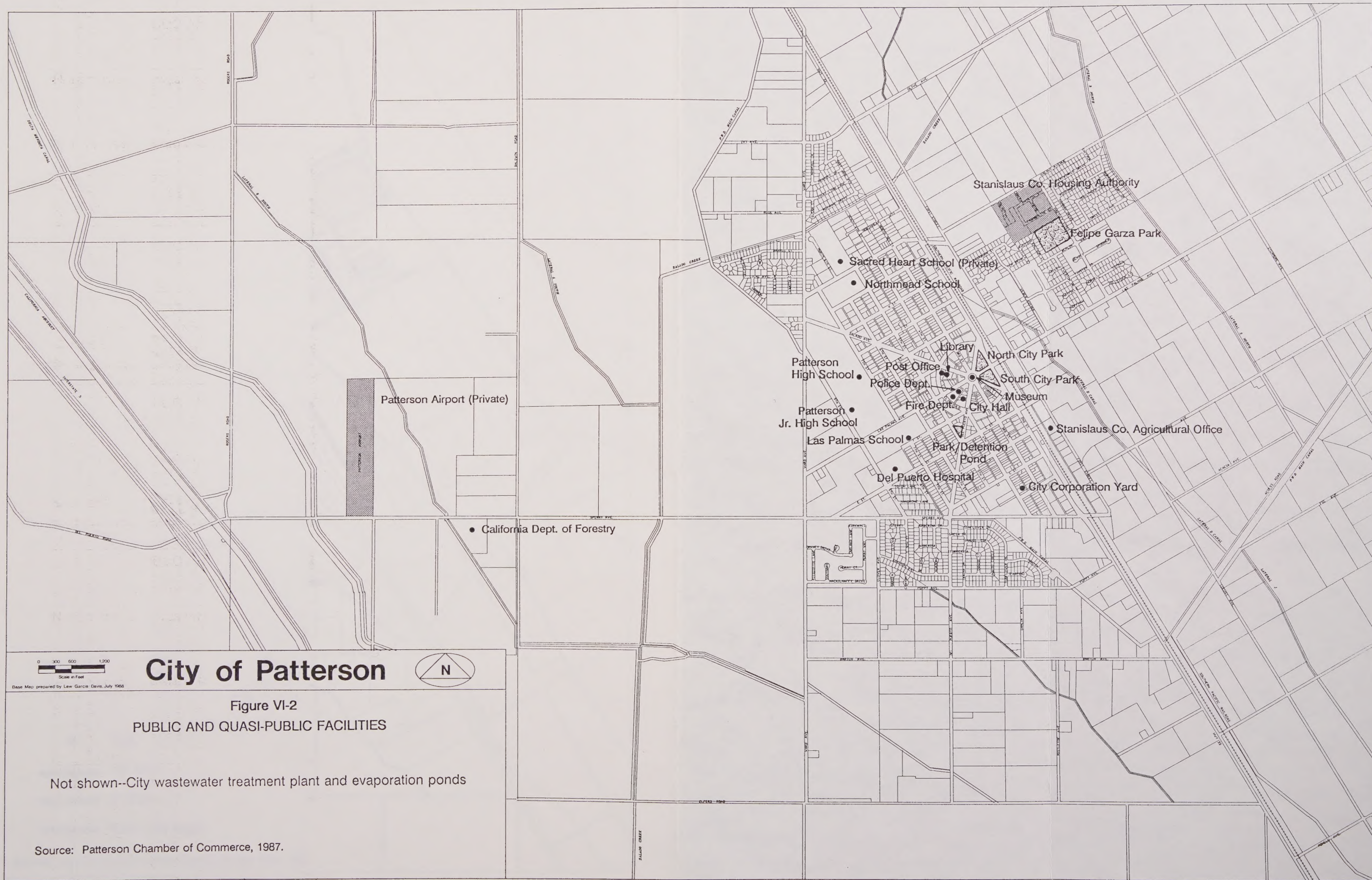
As of June 1988, the City had approximately 2,000 total customers in its system. All customers are metered, including all residences. In 1987, the City's total annual water usage was 340 million gallons (307 million gallons were sold to metered customers, the rest was used for other purposes, such as flushing pipes and fire hydrant testing). This works out to an average of .93 million gallons per day (mgd). Presently, the City operates its water system at about 52 percent of its capacity during peak months. Well No. 5, the City's newest well, is usually not operated because of its high production rate. The Public Works Department is considering installing a smaller pump so it will be able to economically pump lower quantities of water.

Figure VI-1

CITY ORGANIZATIONAL CHART



*Jointly appointed by City Council and Patterson Unified School District



City of Patterson

Figure VI-2
PUBLIC AND QUASI-PUBLIC FACILITIES

Not shown--City wastewater treatment plant and evaporation ponds

Source: Patterson Chamber of Commerce, 1987.

The City's *Water System Master Plan*, prepared by Lew-Garcia-Davis in 1984, identifies a site for a new well east of the city near Orange and Acacia Avenues and extensions of water distribution lines to the east. The Plan was completed prior to the surge of residential growth in 1985 and 1986. The City will have to evaluate the location of future wells based on water system demands and the direction of growth.

Fire flow requirements for Patterson recommended by the Insurance Services Bureau are:

Residential	1,000 gpm
Principal Business District	2,500 gpm
Industrial and other Business Districts	3,000 to 6,000 gpm

In some areas, the water system is unable to provide the recommended fire flow due to undersized mains. The primary area is the older downtown area and surrounding residential and commercial areas. The City is planning to install ten-inch mains along M and E Streets (see Figure VI-3) to provide looping for the entire system and increase water pressure and volume in the areas surrounding downtown. Undersized mains in the older part of the city will require upgrading.

Irrigation Districts

Three irrigation districts serve the Planning Area: the Patterson Water District; West Stanislaus Irrigation District; and the Del Puerto Water District. The boundaries of these districts are shown in Figure VI-4. The Patterson Water District currently provides water to irrigate approximately 14,000 acres that surround the city, primarily the lands to the east of Patterson and west of the San Joaquin River.

The Patterson Water District receives water from the Central Valley Project (CVP), the San Joaquin River, and maintains one groundwater pump. The district served approximately 35,000 acre-feet (af) of water in 1987. The district contracts with the U.S. Bureau of Reclamation for 22,500 acre feet per year (af/yr) of water from the CVP, and augments the remainder with water from the San Joaquin River and groundwater. Irrigation water from the CVP is conveyed by the Delta Mendota Canal, which is located west of the city. From there the water is conveyed to district lands by a series of main and lateral canals.

The West Stanislaus Irrigation District provides water for irrigation to the area north and west of the city. The district services about 25,000 acres, with water primarily from the CVP. The district provided 78,000 af of water in 1987. The district has a contract for 50,000 af/yr of CVP water and is licensed to pump 262 cfs of water per year from the San Joaquin River. Water is conveyed from the Delta-Mendota Canal by open canals and pipes. The district maintains 46 miles of concrete-lined canals, 16 miles of unlined canals, and 22 miles of sublateral concrete pipe.

The Del Puerto Water District provides irrigation water to approximately 3,100 acres west of the City of Patterson. The district contracts for 12,060 af/yr of CVP water conveyed by the Delta-Mendota Canal. The Del Puerto Water District has no distribution system of its own; all means of distribution are privately owned and maintained.

SEWAGE COLLECTION, TREATMENT, AND DISPOSAL

The City of Patterson provides sanitary sewer collection and treatment services for all residential, commercial and industrial developments within its city limits, with the exception of Patterson Frozen Foods Company, which operates its own industrial wastewater disposal facility. Residences in the unincorporated Planning Area use septic tanks.

Patterson's sanitary sewer system consists of a network of pipelines, two lift stations, and a wastewater treatment plant that provides secondary treatment. The primary sewer mains are depicted in Figure VI-5.

The treatment plant was recently expanded to a capacity of 1.0 million gallons per day (mgd). Treated wastewater is percolated and evaporated in 50 acres of ponds located about one-half mile from the San Joaquin River. The City has a permit from the Central Valley Regional Water Quality Control Board permitting it to discharge its treated effluent to the San Joaquin River. It is more economical, however, to evaporate it in the city's ponds.

In 1987, sewer flows averaged 520,000 gpd. Peak flows during the winter are typically 700,000 to 800,000 gpd, due to infiltration and inflow (I/I). I/I results from old, cracked, and corroded pipes and high groundwater levels. During severe storms, peak flows from sewer lines can reach 3 to 4 million gallons in a day.

The City's sewage ponds are more than adequate to accommodate average daily flows. Since 1981, the City has had to discharge its sewage to the river on only one day, during a storm when flows were high and its ponds were filled. The Public Works Director estimates that the ponds have the capacity to hold treated effluent up to the treatment plant's capacity of 1.0 mgd. The City prefers not to discharge to the river. When the plant is operating at 1.0 mgd, additional land will be required for evaporation ponds to avoid discharging to the river during winter months. The quality of the treated effluent presents possible use for irrigation water.

Patterson Frozen Foods Company has its own industrial wastewater disposal facility. The company's ponds are located at Rogers Road near Interstate 5.

Lew-Garcia-Davis prepared the City's *Sanitary Sewer Collection System Study and Master Plan* in 1985. The plan provided future expansion plans based on assumptions of growth to the east. The City will need to reevaluate its sewer collection expansions based on the future direction of growth as determined by the General Plan.

STORM DRAINAGE

As of June 1988, the City's drainage system is composed of five detention basins and storm drain lines. Figure VI-6 shows the locations of existing lines and detention basins. In 1986, Lew-Garcia-Davis completed a *Storm Drain Study and Master Plan* to identify existing and future drainage problems and outline alternatives and their costs. The study concluded that there were not adequate gravity outfall facilities to directly convey the entire stormwater runoff from the City to the San Joaquin River, and that the costs of constructing such a system would be prohibitive. The study suggested controlling drainage in detention basins and then conveying it to the river via existing facilities, including Salado Creek (Black Gulch pipeline), the Patterson Water District overflow pipe, and an abandoned industrial sewer line.

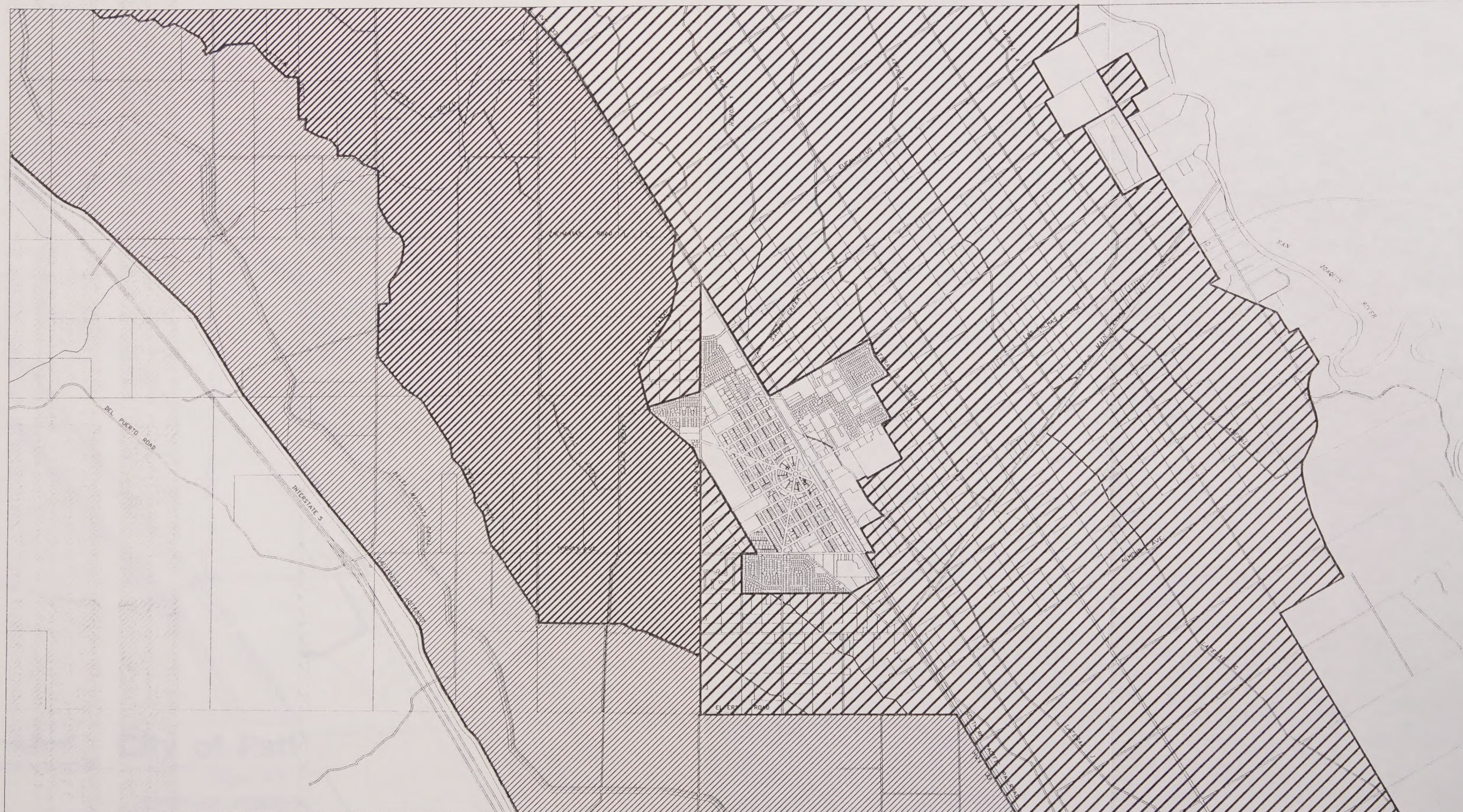
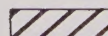


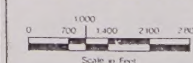
Figure VI-4
IRRIGATION DISTRICTS

 Del Puerto Water District

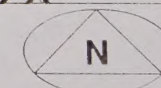
 West Stanislaus Irrigation District

 Patterson Water District

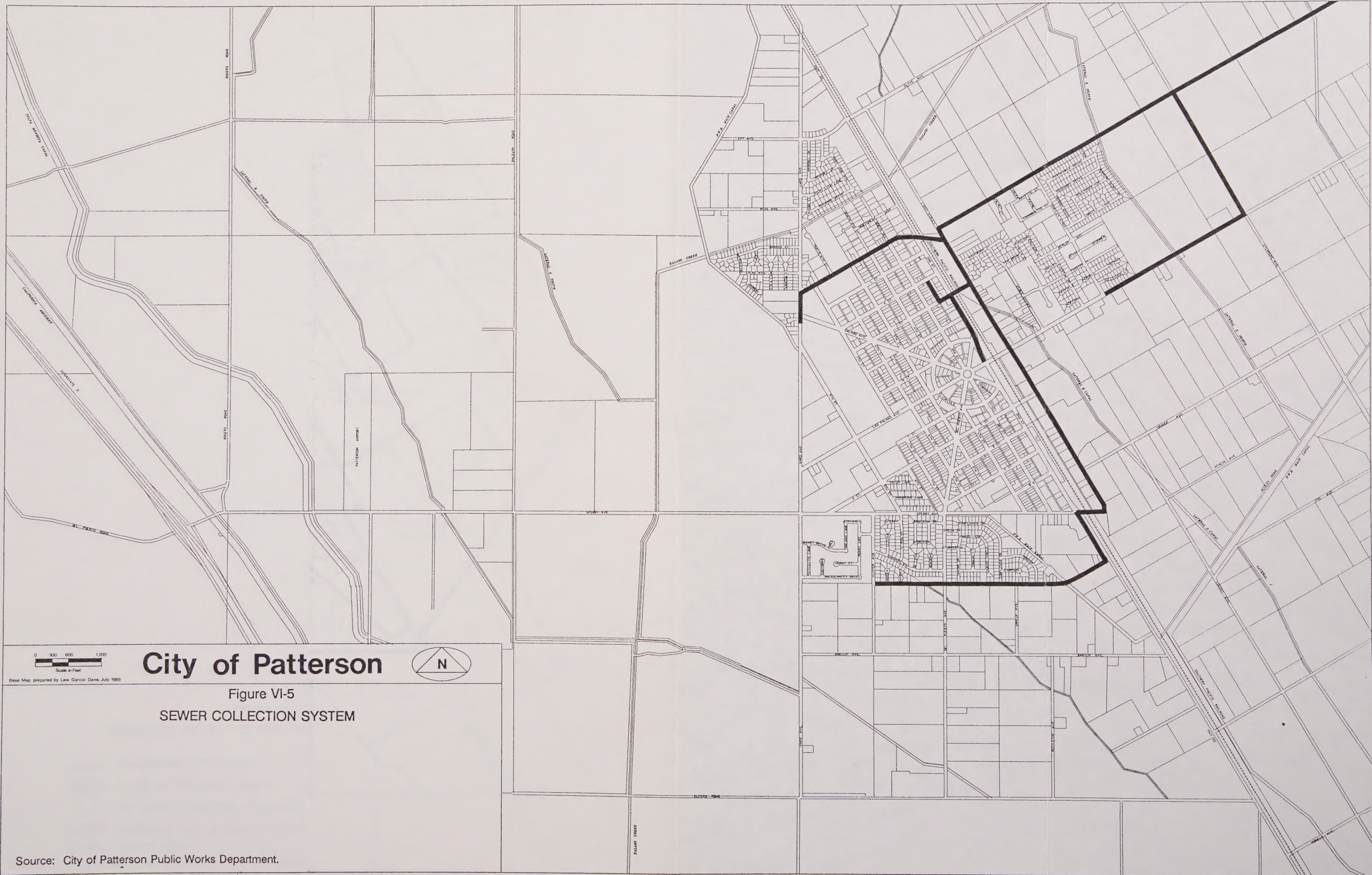
Sources: Patterson Water District, Del Puerto Water District, and West Stanislaus Irrigation District.

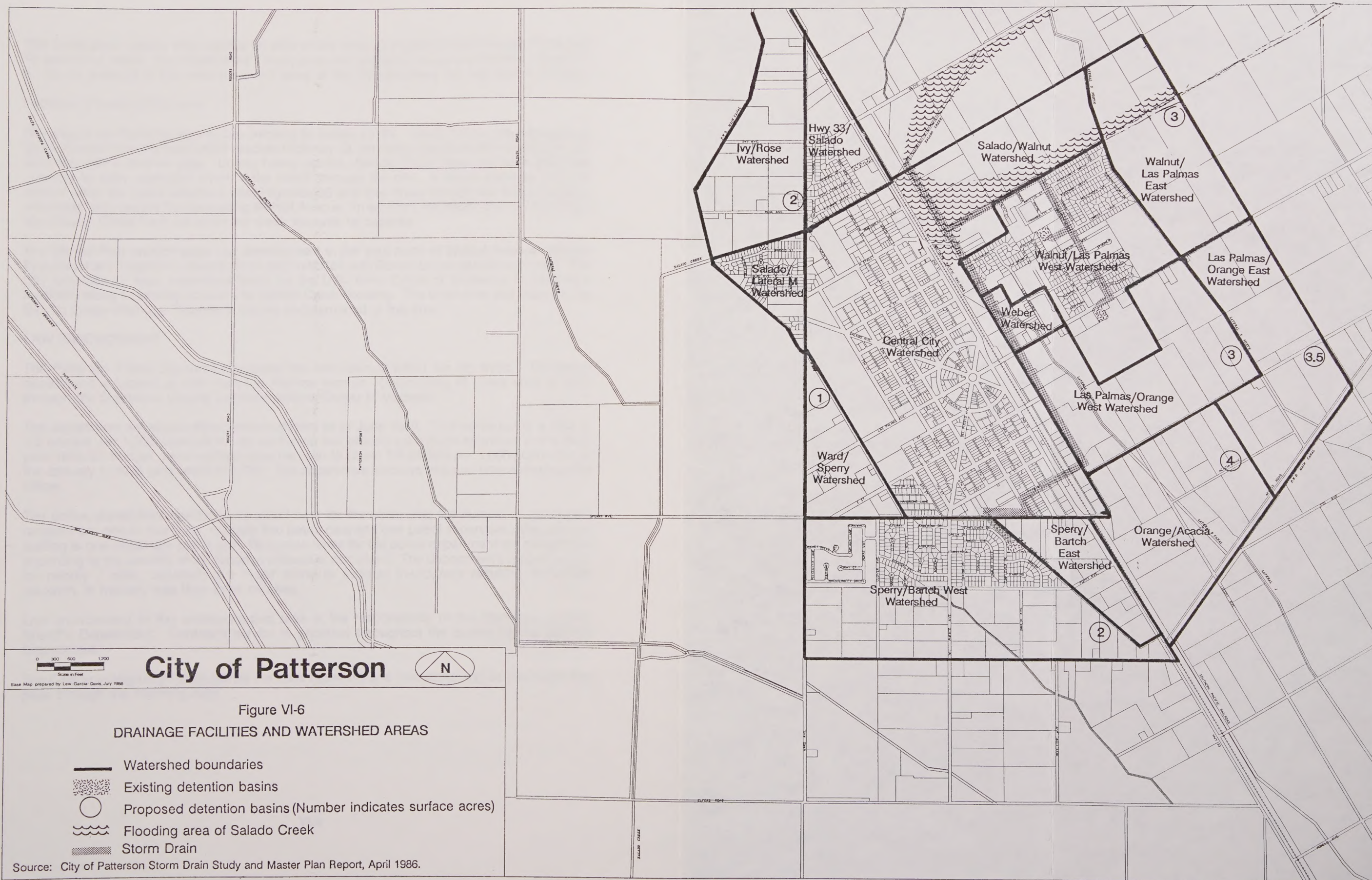


Scale in Feet
Base Map prepared by Lew Garcia Davis, July 1988



Patterson Planning Area





The *Storm Drain Master Plan* divides an area which extends slightly beyond the city limits into 14 watershed areas. The *Master Plan's* study area and watershed areas are shown in Figure VI-5. Storm drainage in the unincorporated areas of the Planning Area has not been evaluated.

Localized Flooding Problems

Flooding in the Planning Area is due primarily to Salado Creek. Salado Creek flows through an earth channel from the west until it reaches Highway 33, where the natural creek was filled in and replaced with a 36-inch pipe. During heavy storms, Salado Creek does not have adequate capacity to carry upstream storm water runoff through the city. A major drainage problem occurs when the creek overflows near Highway 33 and then flows through the Salado/Walnut watershed and causes flooding along Walnut Avenue. In addition, two storm drains which drain into Salado Creek back up when the creek exceeds its capacity.

The *Master Plan* recommends that development in the area north of Walnut Avenue between First Street and Irrigation Lateral 3 North be prohibited until Salado Creek can be controlled. The City and County have committed funds for the U.S. Army Corps of Engineers to perform a feasibility study to identify solutions to Salado Creek flooding. The timeframe and financing for Salado Creek drainage improvements are undetermined at this time.

LAW ENFORCEMENT

The Patterson Police Department provides law enforcement within the city limits. The police department is located at 433 West Las Palmas Avenue. Dispatching of police units is done through the Stanislaus County Communications Center in Modesto.

The department employed eleven sworn officers as of June 1988. This works out to a ratio of 1.6 officers per 1,000 population. An additional two officers have been approved in the fiscal year 1988/89 budget, which will increase the ratio to about 1.9 officers per 1,000 population at the January 1, 1988 population of 6,700. The department employs one part-time animal control officer.

The police department operates one patrol beat for the entire city; the number of patrol cars ranges from one to four units, typically two patrol cars and one patrol supervisor. The average staffing is one officer per patrol unit. Response times for the police department are categorized according to the severity of the reported offense or complaint. The department's response time for priority 1 calls, constituting a major crime or incident in-progress requiring immediate dispatch, is typically less than three minutes.

Law enforcement in the unincorporated area is the responsibility of the Stanislaus County Sheriff's Department. Coroner's service is provided throughout the county by the Sheriff's Department.

The California Highway Patrol patrols the state highways and interstates and county roads that pass through the Planning Area.

TABLE VI-2

PATTERSON POLICE DEPARTMENT
SUMMARY OF INCIDENTS AND OFFENSES REPORTED
1985, 1986, and 1987

	<u>1987</u>	<u>1986</u>	<u>1985</u>
<u>Part I Crimes</u>			
Murder	0	0	0
Rape	1	1	0
Robbery	3	4	2
Assault	88	70	46
Burglary	106	111	126
Theft	193	211	176
Motor Vehicle Theft	<u>14</u>	<u>12</u>	<u>12</u>
Total Part I Crimes	405	409	362
<u>Other Crimes</u>			
Arson	1	2	3
Traffic Accidents	155	122	94
Traffic Citations	1,174	677	758
Driving Under Influence	136	101	29
Check Investigations	75	66	65
Narcotic Investigations	59	67	15
Assist Other Agencies	353	419	362
Abandoned Vehicles	223	76	29
Disturbing the Peace	457	354	307
Warrants Served	99	98	68
<u>Total Arrests</u>			
Adult	724	467	256
Juvenile	161	122	37
Total Incidents	5,882	4,459	3,952
Total Reports	4,905	4,092	3,546
Stolen Property	\$239,067	\$136,172	\$151,864
Recovered Property	\$ 25,336	\$ 51,528	\$ 44,357

Source: Patterson Police Department, 1988.

FIRE PROTECTION

Fire protection within the Planning Area is provided by the Patterson Fire Department and the West Stanislaus Fire District (WSFD). The Patterson Fire Department and WSFD are volunteer fire departments which share a full-time fire chief and a fire station in Patterson. For administrative purposes, however, they operate as separate entities. The Patterson Fire Department provides fire protection to all lands within the city limits. The WSFD boundaries include an area of approximately 625 square miles, including all unincorporated lands within the Planning Area.

The fire chief serves as chief of both the Patterson Fire Department and the WSFD, with half of his salary paid by each entity. The Patterson Fire Department is staffed by 39 volunteers and the WSFD by another 135 volunteers. Volunteers are called based on the area where of the call.

The fire station is located at 433 West Las Palmas Avenue. This facility does not have adequate space for administration, equipment and equipment maintenance, and storage, or adequate parking. The WSFD operates out of four additional stations--in Westley, Crows Landing, Newman, and El Solyo.

The WSFD has mutual aid agreements with all adjoining fire districts, including the Woodland Avenue Fire District, the Salida Fire District, the Westport Fire District, the Mountain View Fire District, and the Crows Landing Naval Base. The California Department of Forestry operates a fire station on Sperry Road east of Interstate 5 to combat fires during the summer fire season.

The fire department's equipment includes three engines and one rescue vehicle (owned jointly by the City and the WSFD). Equipment owned by the WSFD includes nine engines (two reserves), five water tankers, three rescue vehicles (one reserve, one each owned jointly with the Cities of Patterson and Newman), one mobile air compressor, a large mobile generator, and a pickup truck.

The fire department's average response time varies, depending on the area. Response times in most areas within the city are typically about three to six minutes. In the WSFD's service boundaries, response times can vary greatly, up to one hour to the more isolated areas.

Public protection classifications are designated by the Insurance Services Office (ISO). The ISO considers three primary factors in their rating system: fire department location, personnel, and equipment (50 percent), water supply and fire flow capacity (40 percent); and communications capabilities (10 percent). Ratings are based on a scale of 1 to 10, with 1 being the best possible protection. The Patterson Fire Department maintains an ISO rating of 6 within the city. Outside the city, the ISO rating is 9 overall, with an 8 for dwelling units.

In addition to fire suppression, the fire department's services include: fire prevention, public education, fire hydrant maintenance, hazardous materials response, and nuisance abatement.

SCHOOLS

Patterson Unified School District

School service within the Planning Area is provided by the Patterson Unified School District. The District boundaries include an area larger than the Planning Area; its northern boundary is San

Joaquin County, its eastern border is the San Joaquin River, its southern border is Marshall Road, and its western border is Alameda County.

PUSD operates five elementary schools, one junior high, and one high school. The high school, junior high, and two of the district's elementary schools are located in Patterson. The other three elementary schools are located in Westley, the San Antonio Valley, and in Vernalis. Addresses of the schools within the district and their respective grades are given below. The locations of schools located within the Planning Area are shown in Figure VI-1.

Las Palmas School (Grades 4-6)
624 West Las Palmas Avenue
Patterson

Rising Sun School (Grades K-5)
Welty Road
Vernalis

Northmead School (Grades K-3)
625 L Street
Patterson

Patterson Junior High School (Grades 7-8)
201 North 9th Street
Patterson

Grayson School (Grades K-6)
Howard Road
Westley

Patterson High School (Grades 9-12)
200 North 7th Street
Patterson

Harney School (Grades K-8)
San Antonio Road
Livermore

The PUSD also has five pre-school classes; two are offered at Northmead School, two at Grayson School, and one at the Stanislaus County Housing Authority facility on Walnut Avenue.

In 1988, the student-teacher ratio within the PUSD was 23.5 to 1 for K-6, 25.6 for grades 7-9, and 27.4 to 1 for grades 10-12. Enrollment in each school and the schools' capacity based on the state formula are presented in Table VI-4.

The PUSD faces special needs for bilingual and bicultural education because its student body is approximately 70 percent Hispanic. Grayson School, which is nearly 100 percent Hispanic, experiences a surge in school population each May when children of seasonal migrant workers which are housed in migrant housing units in Patterson and Westley enroll at the school. Enrollment at Grayson School grew from 269 during the last week of April to 332 in June 1988.

The PUSD operates a summer program for children of migrant workers to help them catch up on needed course work. In addition, a self-funded program developed by Northmead School staff members in cooperation with Modesto Junior College offers was initiated for the summer 1988. "College for Kids" offers a variety of one-hour courses.

TABLE VI-4

**PATTERSON UNIFIED SCHOOL DISTRICT
SCHOOL ENROLLMENT AND CAPACITY**

<u>School</u>	<u>Enrollment (As of June 1988)</u>	<u>Capacity</u>
Grayson School (Westley)	332	335
Harney School (San Antonio Valley)	14	33
Las Palmas School	438	629
Northmead School	692	751
Rising Sun School (Vernalis)	47	N/A
Patterson Junior High School	356	503
Patterson High School	<u>520</u>	<u>730</u>
Total	2,399	2,981

Source: Patterson Unified School District, 1988.

The PUSD assesses new facility development fees on new development at a rate of \$1.53 per square foot of residential development and \$.25 per square foot of new commercial and industrial development.

Reconstruction projects at Las Palmas and Grayson Schools are planned by the PUSD. The district is awaiting funds to be distributed by the State Allocation Board. State officials are still discussing how funds will be distributed statewide according to the priority system. The two projects are of highest priority on the state's list. Reconstruction is expected to begin in fall 1988.

The district's Task Group on Growth has met with various groups to discuss funding and construction procedures for a new school. School officials estimate that the PUSD will need to begin building a new school in three to four years, although other alternatives are being explored, including year-round schools and double sessions. Options for erecting a permanent structure, a completely modular school, or a combination are being studied. The PUSD Board of Trustees has appointed a Site Selection Committee to identify potential new school sites. Six locations have been tentatively chosen.

For purposes of calculating future school population, the PUSD estimates that .74 school-aged children are generated per dwelling unit.

Sacred Heart School is a parochial school in Patterson which serves grades K-6. Sacred Heart School is located at 505 M Street, and had a total enrollment of 85 students as of June 1988.

Colleges and Universities

Patterson is served by the Yosemite Community College District. The nearest community college is Modesto Junior College in Modesto, which has two campuses. Modesto Junior College West is located on Blue Gum Avenue and the main campus is located on College Avenue. The colleges in the district offer a full program of courses suitable for transfer to a four-year college or university, and offer an Associate of Arts degree.

California State University, Stanislaus, is located in Turlock, approximately 18 miles from Patterson. CSUS offers a variety of four year bachelor of arts and science degrees, and a limited number of masters of arts degrees. Chapman College in Modesto, a private college, also offers bachelors and masters degrees. A number of business and vocational schools are also located in Modesto.

Special Education Services

The John F. Kennedy Special Education Center in Modesto provides a complete range of classes for the trainable mentally retarded, developmentally handicapped, and multi-handicapped students, from 0 to 22 years. The center also provides vocational training and parent counseling.

MEDICAL SERVICES

Del Puerto Hospital is located at 9th and "E" Streets in Patterson. The hospital is operated by the Del Puerto Hospital District formed in 1947 for the purpose of developing Del Puerto Hospital. The district's boundaries encompass an area larger than the Planning Area, including the communities of Patterson, Westley, Crows Landing, Vernalis, and Grayson. The district is managed by a five-member board of directors, elected at-large for four year terms.

Del Puerto Hospital is an acute care facility which began operations in 1950. Its facilities include medical and surgical care, perinatal care, and the Schick-Shadel Chemical Dependency Unit. As of July 1988, the hospital had 43 licensed beds: 18 chemical dependency, 6 perinatal, and 19 medical/surgical. In 1985, the hospital adopted a *Twenty-Year Development Plan for Del Puerto Hospital* to plan for growth and expansion. The Master Plan's estimated number of beds needed through 2005 is summarized in Table VI-5.

The *Master Plan* assumes that by 1990 the hospital will expand to include an intensive care unit, a skilled nursing unit, after-hours health service, and will establish or co-sponsor a Home Health Service. The hospital does not presently have a 24-hour emergency room. A physician is available from 6 p.m. to 6 a.m. on weeknights and on weekends and holidays. There is no physician in house from 6 a.m. to 6 p.m. weekdays, however. Local physicians are on call to serve daytime emergencies.

According to the *Master Plan*, 44.7 percent of Patterson residents who visited a Stanislaus County hospital in 1984 used Del Puerto Hospital. The Hospital Administrator attributes this partly to the absence of an obstetrician in Patterson, and concludes that the percentage would increase if an obstetrician were to locate in the area.

TABLE VI-5
DEL PUERTO HOSPITAL
ESTIMATED NUMBER OF BEDS NEEDED
1985 - 2005

	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>
Hospital Market Area Population ¹	11,646	17,524	22,526	29,740	40,226
<u>Bed Need</u>					
Medical/Surgical/Pediatric	19	16	21	27	37
Chemical Dependency	7	11	14	18	25
Perinatal	2	3	4	5	7
Intensive Care	N/A	3	4	5	6
Skilled Nursing	<u>N/A</u>	<u>36</u>	<u>46</u>	<u>61</u>	<u>83</u>
Total Bed Need	28	69	88	117	158

¹ Total market area includes Patterson, Crows Landing, Vernalis, Westley, Grayson, and Other. Population projections for Patterson area: 1985 - 5,020; 1990 - 8,138; 1995 - 12,907; 2000 - 20,021; 2005 - 24,871.

Source: *Twenty-Year Development Plan for Del Puerto Hospital: 1985-2005*, Prepared by Cattaneo & Stroud, Inc., Burlingame, CA, 1986.

The hospital owns a vacant parcel adjacent to the hospital. The hospital board of directors is negotiating to lease a portion of the land to private developers on a preferred basis to develop specialty care and medical office facilities. The intention is that the doctors in this complex would use hospital services for their patients, thus increasing hospital use. Development of medical offices would require rezoning of the parcel. The issue is still under negotiation and no agreement has been reached as of August 1988.

As growth continues and demand for hospital services in the Patterson area increases, there will be a need for hospital expansion and possible relocation. As of July 1988, the district is not seeking new land to site a new facility.

There is currently a shortage in nursing home space countywide. The only nursing home facility in western Stanislaus County is a 95-bed facility in Newman. A feasibility study performed for the hospital district indicated that Patterson would be able to support a nursing home but the district was not in the fiscal position to achieve financing for the project. The hospital has improved its situation over the past fiscal year, however, and according to the Hospital Administrator, the district may begin to investigate financing and alternatives during the 1988/89 fiscal year. The option under consideration is construction of a 55-bed facility on part of the

vacant parcel adjacent to the hospital. A nursing home is permitted under the parcel's present zoning.

The Patterson Ambulance Company operates two ambulances out of Del Puerto Hospital. Five full-time paramedics and a number of volunteer ambulance workers provide service to the entire Planning Area and beyond.

Patterson Medical Clinic is located at 44 North Third Street. The clinic provides low cost medical care and mental health counseling.

SOLID WASTE DISPOSAL

The City of Patterson provides mandatory solid waste collection to all residents and businesses in the city. The City provides pick up twice weekly. In 1987, the City collected a total of about 12,000 cubic yards. The City Public Works Director estimates that the total will reach approximately 14,000 cubic yards in 1988.

The City owns four garbage trucks, and has reserved one as standby. With increase demands, however, the City may need to purchase an additional truck in order to reserve one for standby because garbage trucks require substantial maintenance.

The City transports the refuse to the Fink landfill, located west of Crows Landing. The County is presently constructing a waste-to-energy facility at the Fink Road site which will recycle and burn refuse, and provide electricity to Pacific Gas & Electric's system. The plant is expected to be operational by late 1988. City disposal fees are expected to rise to fund the more expensive disposal method.

The City sponsors an annual Spring cleanup as a way for residents to clear weeds, brush, debris, and junk from their homes and property. Residents pile the debris at the curb and city crews pick it up at no charge.

In the unincorporated Planning Area, garbage is collected by private franchises under contract to the County.

LIBRARY

Library service is provided within the Planning Area by the Stanislaus County Public Library system. The Patterson branch is located at 46 North Salado Avenue. The Patterson library, with a staff of one full-time librarian and 14 hours a week of part-time page service, offers a collection of 22,238 volumes and provides reference and information assistance for patrons.

The library facility occupies 5,816 square feet. According to the librarian, the library presently has adequate space to accommodate patrons and has no expansion plans.

MUSEUM

The museum is located at the Plaza building in the center of the Plaza circle. The Plaza building was the town's first building and served as the Patterson Ranch Company office. The museum is operated by Patterson Township Historical Society. Hours are Monday, Wednesday, and Friday from 9 a.m. to 11 a.m. Special tours may be arranged.

GAS AND ELECTRICITY SERVICE

Natural gas and electricity service are provided by Pacific Gas and Electric Company. This privately-owned utility company operates throughout Central and Northern California under authority from the California Public Utilities Commission.

Existing electrical transmission lines supplying the Patterson area consist of 115 kilovolt (kv) source lines.

TELEPHONE SERVICE

Evans Telephone Company provides telephone service to Patterson. In July 1988, Evans Telephone installed a new switching system as part of its expansion program for Patterson. The former switching station could serve a maximum of 3,500 access lines. As of July 1988, 3,150 lines were operating in Patterson. The new switching system has the capability to handle over 10,000 lines.

FINDINGS

- The City's water supply is provided by five city wells. The City is presently operating at about 60 percent of its capacity during peak months. The City's highest volume well, Well No. 5, is seldom used because it is not economical because it pumps such high volumes. The Public Works Department is investigating installing a smaller pump so it will be able to economically pump lower volumes of water.
- Some of the older areas of the city are presently served by undersized water mains. The City is planning to upgrade its mains along sections of M and E Streets to provide looping for the entire system. Undersized mains in the older parts of the city require upgrading to meet fire flow requirements.
- As growth occurs and the city expands, agricultural lands in the surrounding water districts will be lost to urbanization. Concomitantly, demand for irrigation water would be reduced while the demand for domestic water would be increased. If the City's domestic supplies become inadequate, it may be necessary to investigate modifying federal contracts with the appropriate water districts to include municipal and industrial water supplies.
- The City's sewage treatment plant is presently operating at about 60 percent of its total capacity.
- The City evaporates its treated sewage in ponds rather than discharging the treated effluent to the San Joaquin River, although it has a permit to do so. The treated effluent could potentially be used for irrigation purposes in the future.
- The City's storm drainage system relies on detention basins and storm drains. Localized flooding problems occur east of Highway 33 and north of Walnut Avenue during heavy storms when Salado Creek backs up.
- The Patterson Police Department employs eleven sworn officers as of July 1988, and is in the process of adding two more. Response times for priority 1 calls are typically less than three minutes.
- The Patterson Fire Department is a volunteer fire department. Patterson maintains an insurance rating of 6 within the city, areas outside the city have ratings of 8 or 9.
- The Patterson Unified School District operates four schools within the Planning Area: two elementary, one junior high, and one high school. Although these schools are not presently impacted, future growth will require facility expansion or the development of new school sites within the next few years.
- Del Puerto Hospital served about 45 percent of Patterson residents using Stanislaus County hospitals in 1985. Expansion plans of the hospital include an intensive care unit, a nursing home, and a Home Health Service.
- The City provides solid waste collection and disposal services to all residents twice weekly. The City transports its waste to the County's Fink Road landfill. Construction of the County's waste-to-energy facility may increase the city's disposal costs.

BIBLIOGRAPHY

"Avery Perplexed by Directors' Position," *Patterson Irrigator*, March 8, 1988.

City of Patterson, *General Plan*, 1978.

City of Patterson, *Sanitary Sewer Collection Study and Master Plan*, Prepared by Lew-Garcia-Davis, Ceres, CA, May 1985.

City of Patterson, *Storm Drain Study and Master Plan Report*, Prepared by Lew-Garcia-Davis, Ceres, CA, April 1986.

City of Patterson, *Water System Master Plan*, Prepared by Lew-Garcia-Davis, Ceres, CA, October 1984.

Del Puerto Hospital District, *Twenty-Year Development Plan for Del Puerto Hospital: 1985-2005*, Prepared by Cattaneo & Stroud, Inc., Burlingame, CA, 1986.

"Garbage Rates Bound to Rise," *Patterson Irrigator*, April 26, 1988.

"Summer Classes Offered Here," *Patterson Irrigator*, June 14, 1988.

Stanislaus County Economic Development Corporation, *Patterson Community Assessment*, May 1987.

Stanislaus County, *General Plan Support Documents*, 1987.

"Voters' Nod on 75 Puts Local School in Line for Facelifts," *Patterson Irrigator*, June 14, 1988.

PERSONS CONSULTED

Avery, Thomas, Hospital Administrator, Del Puerto Hospital

Bruch, Harter, Acting Planning Director, City of Patterson

Bull, Dick, Police Chief, Patterson Police Department

Gaiser, Dick, Fire Chief, Patterson Fire Department and West Stanislaus Fire District

Hansen, Helen, Business Manager, Patterson Unified School District

Lopez, Ignacio, Public Works Director, City of Patterson

Nachbar, John, City Manager, City of Patterson

Popkes, Sandy, Librarian, Stanislaus County Library - Patterson Branch

GLOSSARY

af - acre-feet

cfs - cubic feet per second

gpad - gallons per acre per day

gpcd - gallons per capita per day

gpd - gallons per day

gpm - gallons per minute

Infiltration/Inflow (I/I) - Infiltration is extraneous water that leaks into sewer lines from surrounding saturated ground through various means. Inflow is water that is channeled into the sewage collection system by storm water collection systems such as roof leaders, foundation drains, and storm sewers.

Insurance Services Office (ISO) - An agency which evaluates fire protection features for all fire departments for purposes of establishing rates for underwriters.

mgd - million gallons per day

PUSD - Patterson Unified School District

psi -pounds per square inch

Response time - The amount of time it takes police or fire units to arrive at the scene of a reported incident.

USBR - U.S. Bureau of Reclamation

WSFD - West Stanislaus Fire District

CHAPTER VII

RECREATIONAL AND
CULTURAL RESOURCES

RECREATIONAL AND CULTURAL RESOURCES

INTRODUCTION

City of Palmdale has a variety of recreational, cultural, and historic resources. The resources are located throughout the City and are an important part of the City's heritage. The City is committed to the preservation and management of these resources and to providing opportunities for the public to enjoy them.

The City has a long history of providing recreational facilities and programs for its residents. The City has a variety of parks, trails, and recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of cultural and historic resources, including the Palmdale Museum, the Palmdale Historical Society, and the Palmdale Historic District.

RECREATION AND RECREATION

Parks

The City of Palmdale has a variety of parks and recreational facilities. The City has a variety of parks, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center.

The City has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center.

The City has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center.

The City has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center.

The City has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center. The City also has a variety of recreational facilities, including the Palmdale Sports Center, the Palmdale Golf Course, and the Palmdale Aquatic Center.

CHAPTER VII

RECREATIONAL AND CULTURAL RESOURCES

CHAPTER VII

RECREATIONAL AND CULTURAL RESOURCES

INTRODUCTION

The City of Patterson has a variety of recreational, cultural, and archaeological resources. These resources take several forms ranging from the contemporary city and its open space resource through the rich historic settlement and development periods, to the ethnography and archaeological resources of the native American period.

Although no original research and fieldwork was conducted in the development of this chapter, numerous published sources and many public agencies and individuals involved in cultural, historical, and archaeological resources in the Patterson area were consulted in preparing this chapter.

PARKS AND RECREATION

Parks

Parks in Patterson are operated and maintained by the City. The City presently has about eight acres of parkland, excluding school property and facilities. Patterson's parks and their facilities are listed below and their locations are shown in Figure VII-1.

- North and South City Parks at Las Palmas and Highway 33 make up a combined three acres. These are the oldest parks in Patterson, established when the town was originally laid out. The parks have playground equipment, and are heavily used on holidays and weekends.
- Felipe Garza Park is a five-acre park at Walnut and Las Palmas Avenues. Facilities at the park include playground equipment, a baseball diamond, and an open grassy area.

In addition to these public park facilities, the city relies heavily on school grounds and equipment for parks and recreational uses. School grounds are open to the public after school and during the summer.

- Northmead School takes up seven acres at M Street and Fifth Street. Facilities include playground equipment and large open grassy areas.
- Las Palmas School is an 11-acre site at Ninth Street and Las Palmas Avenue. School grounds contain large open grassy areas.
- Patterson High School and Junior High School share a 37-acre site. Facilities include athletic fields, tennis courts, a gymnasium, and swimming pool. Little League baseball games are held at the high school.

Excluding school property, Patterson has a ratio of 0.8 acres of developed parkland to 1,000 population. This is substantially deficient. Under the Quimby Act (California Government Code 66477 et seq.), local governments may require dedication of 3.0 acres per 1,000 population unless the existing park area exceeds that limit, in which case local governments may require up to the existing standard, not to exceed 5.0 acres per 1,000 population.

The City has been collecting park in-lieu fees on new development to purchase and develop a large community park of 40 to 50 acres. The location of the park site and park development are projected to be part of the General Plan project.

Recreation

The City's Recreation Department offers a number of recreational classes and activities. Fees are charged for classes and activities in an attempt to cover costs. Activities include:

Adult Classes

- Aerobics
- Karate
- Open Gym
- Tennis
- Co-ed Body Conditioning
- Tennis Club
- C.P.R.
- First Aid
- Golf
- Square Dancing

Adult Leagues

- Bowling
- Volleyball
- Softball
- Mushball
- Basketball
- Horseshoes

Senior Citizens

- Bus Trips

Youth Classes

- Gymnastics
- Aerobics
- Karate
- Open Gym
- Baseball Camp
- Swimming (Lessons Only)
- Tennis
- Co-ed Body Conditioning
- Youth Wrestling
- C.P.R.
- First Aid
- Golf
- Judo

Youth Leagues

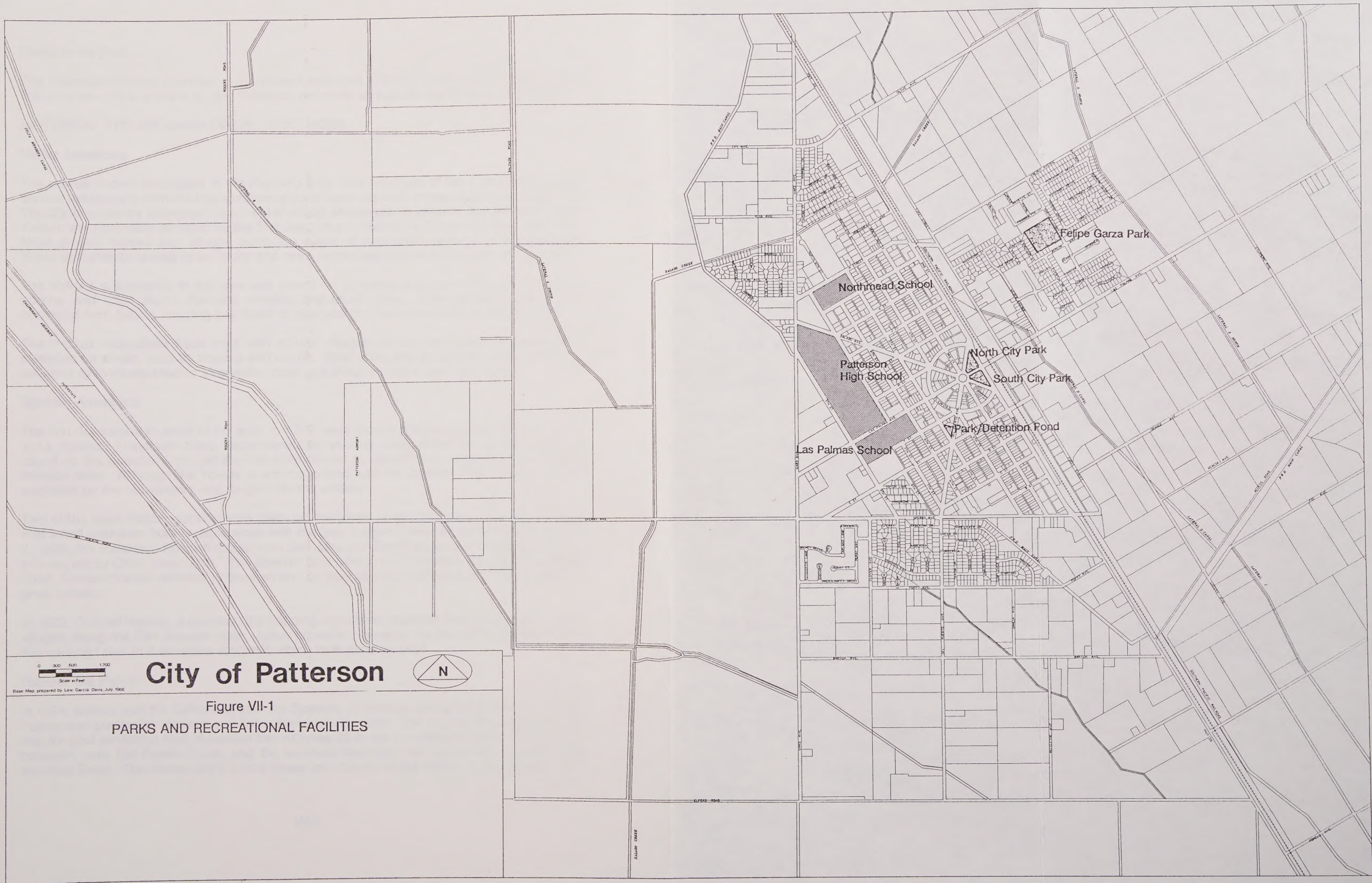
- Basketball
- Football
- Volleyball
- Baseball
- Softball

CULTURAL EVENTS

Apricot Fiesta

The largest cultural event in Patterson is the annual Apricot Fiesta. The first Apricot Fiesta was held in 1971, when the city proclaimed itself the "Apricot Capital of the World". The following year the event was incorporated as the Patterson Apricot Fiesta, Inc. The Fiesta is governed by a board of directors, six of whom are elected at large.

In 1988, Patterson held its 18th Apricot Fiesta on June 3, 4, and 5th. The main events include the crowning of "Miss Apricot" and "Little Miss and Mr. Apricot," a parade with motorized floats, the Lions Club barbecue, and a fireworks show. There are also a variety of entertainment and activities, including arts and crafts, food booths, historical drama, skydiving, and other events.



City of Patterson

Figure VII-1

PARKS AND RECREATIONAL FACILITIES

Picnic in the Park

The Patterson-Westley Chamber of Commerce sponsors a "Picnic in the Park" during the fall. The purpose of the event is to give Patterson residents an opportunity to meet each other.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES

Native Americans

The earliest known inhabitants of the Planning Area were members of the Yokut Tribe, whose earliest presence is estimated by archaeologists to have occurred at least 1,000 years ago. The Yokut's boundaries extended from the Tehachapi Mountains to present day Stockton. The Yokuts were probably attracted by the San Joaquin and Stanislaus Rivers and their tributaries. Most groups located their villages along the edges of permanent streams or watercourses. Yokut settlements tended to be larger and more permanent than in many parts of California.

The Yokut's subsistence in the area was based on gathering and processing of wild seeds, acorns, and other plants, fish and shellfish, and small game. They gained much of their livelihood from fishing, building tule boats to navigate the San Joaquin River and the Delta.

The Yokuts maintained trade links with coastal villages where they traded furs and other materials for shells, such as abalone and clams. Shell disks and dentelium beads, as well as polished cylindrically-shaped magnesite rocks and bi-valves, were used as money.

Spanish-Americans

The first Europeans to arrive in the area, in 1769, were deserters from the Spanish military. In 1813, Spanish Franciscan friars, accompanied by soldiers, entered the San Joaquin Valley to round up the deserters, convert the native Americans to Catholicism, and search for suitable mission sites. Although the Yokuts at first co-existed with the Spanish, they were eventually exploited by the newcomers and fought with the settlers.

Two of the most notable conflicts took place on the banks of the Stanislaus River about a mile and a half upstream from its confluence with the San Joaquin River. In the first battle on May 5, 1829, the combined Spanish forces from San Jose and San Francisco were defeated by the Yokuts, led by Chief "Estanislao." The Spanish later named the Stanislaus River after the indian chief. General Vallejo returned to the area and on May 19, 1829, defeated the Yokuts, inflicting great losses.

In 1832, Colonel Warner, a member of a trapping expedition, reported finding numerous indian villages along the San Joaquin River. Upon his return, however, he found the villages greatly depopulated due to a smallpox epidemic which took place in 1833.

Rancho Del Puerto

In 1824, Mexico won the Californias from the Spanish. A Mexican land grant for the Rancho Del Puerto was granted to Mariano and Pablo Hernandez in 1844. The original Mexican land grant was for land stretching east of present day Highway 33 to the San Joaquin River. The northern boundary was Del Puerto Creek, and the southern boundary was just south of present day Marshall Road. The Hernandez's built a house and corrals on the ranch. From 1844 to 1847,

indian raids in the area were common, as indians that were freed from the missions returned to the area, especially along the banks of the San Joaquin River.

During the early 1840s to the 1860s, thousands of wild horses roamed the plains of western Stanislaus County and immense herds of deer, elk, and antelope were seen. Grizzly bears were common, and wild geese and ducks frequented the area each fall. The eventual shift to heavy agricultural use and alteration of the area for cultivation pressured both the wildlife and the remaining indian population out of the valley.

In 1846, the United States acquired California from Mexico. Soon after, the Gold Rush of 1849 brought many changes. One of the most profitable occupations became cattle raising. The stockmen settled along the river and ran their cattle over the vast plains. The pioneers turned to merchandising, and the town's of Hill's Ferry, Crows Landing, Grayson, and San Joaquin City were born. During periods of high water, freight was shipped by steamboat and barges. During the rest of the year, freight had to be hauled by teams over the road along the river.

A claim and patent for the Rancho Del Puerto were granted to Samuel G. Reed and Reuben S. Wade on May 22, 1855. The land grant is one of a very few that had ever signed by President Abraham Lincoln. Lincoln signed the grant himself because Lincoln had given his clerk the day off. The land was sold to J.O. Eldredge in 1866 for \$5,000, and two months later to John D. Patterson for \$5,400.

The building of the railroad in 1888 marked the abandonment of the river towns. Hill's Ferry moved to Newman, Crow's Landing to its present location, Grayson to Westley, and San Joaquin City to Vernalis. At the time, the Rancho Del Puerto was still John D. Patterson's ranch. He purchased additional land and raised wheat, cattle, purebred sheep, and draft horses on the land. Patterson farmed about 3,000 acres. Wheat was the major crop on the West Side. Stanislaus County was known as the banner wheat county of the state. The farmers had to depend entirely on the rainfall for their crops, however. When the rains failed to come, there was great hardship.

In 1877, the West Side Irrigation District was created. The district planned a project to irrigate the whole West Side from Tulare Lake to Antioch by a canal 100 miles long. However, the law creating the district was declared unconstitutional. A number of irrigation projects were formed, including the Miller & Lux Canal on the south extending from Mendota north to Crows Landing.

The Patterson Town and Colony

John D. Patterson died in 1902. He had no children and left his property to 13 heirs, mainly nieces and nephews. In order to settle the estate, the executors endeavored to sell the property but were unable to do so for more than \$30 an acre, so decided it should be developed. Two of the heirs, Thomas W. Patterson and John Patterson, bought out the others and incorporated the Patterson Ranch Company in 1908, with Thomas Patterson as president. The City of Patterson and the Patterson Colony are the outgrowth of Thomas Patterson.

Patterson first investigated all possible sources of irrigating the land. Learning that extension of the Miller & Lux canal north from Crows Landing would not be feasible, he set about developing his own irrigation system. Patterson conceived the idea of building a series of pump lifts to get water from the San Joaquin River into canals. Patterson risked over half a million dollars on the system, designed by Arthur L. Adams of Berkeley. The system was designed with a series of seven pump stations interconnected by reservoirs. The main canal was built with mules using

Fresno scrapers. In 1910, water first flowed through the canals. The system was the first successful lift irrigation system in the world.

Patterson envisioned a town of beauty and distinction. Using Washington D.C. as model, Patterson design the city in near complete circle, its streets converging like the spokes of a wheel on the Plaza at the center. Parks were laid out along the railroad. At great expense, 484 palm trees were imported from Australia and, alternated with eucalyptus trees, planted along the three miles of Las Palmas Avenue from the river to the town. Oleanders and sycamores were planted along the seven miles of Sycamore Avenue.

The Patterson Ranch Company subdivided the colony into 5-, 10-, and 20-acre plots. By fall 1911, 50 modern residences had been built. The original Patterson Colony Plat Map is shown in Figure VII-2. Patterson Irrigated Farms were advertised widely throughout the Midwest. The first two buildings in town were the Hotel Del Puerto and the Ranch Company office (the Plaza building). The Ranch Company office also housed the post office and the town's first bank. Cement sidewalks were laid in 1911, the *Patterson Irrigator* was first published, and Las Palmas Grammar School commenced construction. By the end of 1912, Patterson had a post office, railroad station, newspaper, school, library, Chamber of Commerce, electric lights and power, two lumber yards, telephone service, a hotel, two general merchandise stores and other shops.

Thomas W. Patterson died in 1914. His cousin, John D. Patterson, came from Canada to help guide the town and colony. Although the town faced some difficult economic conditions following the onset of World War I, Patterson continued to grow. On December 18, 1919, residents of Patterson voted 136 to 47 to incorporate Patterson as a city. In the mid-1920s Patterson received both national and state recognition as one of the few model towns in the United States. It was also recognized as one of the few successful California colonization projects.

Other notable milestones in Patterson's history include the first Las Palmas Bridge across the San Joaquin River, completed in 1936. Del Puerto Hospital began operation in 1950, made possible by the formation of the Del Puerto Hospital District in 1947. The Delta-Mendota Canal (part of the federal Central Valley Project) was completed in 1951. In 1967, Interstate 5 was completed as far south as Los Banos along with the California Aqueduct.

HISTORIC SITES AND BUILDINGS

Patterson contains a number of homes and structures built in the 1920s and 1930s. Three landmarks have been designated as sites of local and county historic significance, and are listed on the State Inventory of Historic Places.

- The Plaza building is located in the center of the Plaza circle. This structure was the original Patterson Ranch Company office and also housed the post office and the town's first bank. The Plaza building is presently used as the town's museum.
- The Del Puerto Hotel, located at 1 Plaza, was the town's first hotel where prospective land owners would stay while they were shown property of the Patterson colony. The building is privately owned.
- Las Palmas Avenue is a three-mile parkway lined with palm trees from Patterson to the San Joaquin River. Palm trees and eucalyptus trees were imported from Australia by Patterson

founder and planted alternately along Las Palmas Avenue. Today, only the palm trees remain along this roadway.

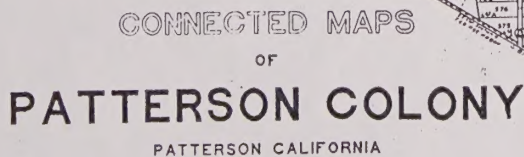
ARCHAEOLOGICAL RESOURCES

The Central California Information Center of the California Archeological Inventory completed a records search for the Patterson Planning Area in 1986. The search revealed no recorded archeological native American Sites located within the Planning Area. To date, however, only about eight percent of Stanislaus County has been surveyed for archaeological resources.

A field reconnaissance of an area beyond the city limits was performed in March 1985. Potential areas of impact were examined for evidence of cultural material. Particular attention was paid to the Salado Creek area. No surface evidence of historical or cultural materials were uncovered. The lack of observable surface evidence is attributed to the amount of agricultural cultivation that has taken place over the last 50 years. In addition, Salado Creek was filled in from Highway 33 to the San Joaquin River and is now piped.

Areas that are considered sensitive (likely to have archaeological or historic cultural resources) are often located near natural watercourses, springs or ponds, and on elevated ground. Many archaeological sites in the Central Valley have been buried by silt and might not be evident by surface surveys. The channels of natural watercourses change over the years and springs dry up, therefore, archaeological sites may be found in areas that are distant from present sources of water.

Figure VII-2

[illegible][illegible][illegible]

FINDINGS

- Patterson presently has about eight acres of developed parklands. This is substantially deficient, and the City has been collecting park in-lieu fees on new development to purchase and develop a major community park.
- The City's Recreation Department offers a wide variety of adult and youth recreation classes and programs.
- The annual Apricot Fiesta is the City's largest cultural event, drawing residents and non-residents to Patterson for the activities.
- Patterson has a rich history associated with Thomas W. Patterson's formation of the town and colony of Patterson and its farming roots.
- Three historic sites in Patterson are listed in the State Inventory of Historic Places: the Plaza building in the center of town; the Del Puerto Hotel; and palm-lined Las Palmas Avenue.
- Most of the Planning Area has not been surveyed for the existence of archaeological resources. Sites along the San Joaquin River and watercourses are areas in which such resources are most likely to be located.

BIBLIOGRAPHY

Association of California Water Agencies, *75-Year History*, 1985.

"A Town's Founding," *The Gateway (A Patterson Township Historical Society Bulletin)*, Volume 1, Number 1, June 1978.

"Big, Big Fiesta Ahead!", *Patterson Irrigator*, June 2, 1988.

The California Indians, by R.F. Heizer and M.A. Whipple, University of California Press, Berkeley, California, 1971.

City of Patterson, *General Plan*, 1978.

City of Patterson, *Preliminary General Plan Environmental Impact Report*, 1984.

Stanislaus County, *General Plan Support Documents*, 1987.

PERSONS CONTACTED

Azevedo, John, Museum Curator, Patterson Historical Society

Bene, Joe, Recreation Director, City of Patterson

NATURAL RESOURCES

WATER RESOURCES

The water resources of the County are primarily the San Joaquin River, the California Aqueduct, and the Central Valley Project. The County is located in the San Joaquin River watershed, which is the primary source of water for the County. The County is also located in the California Aqueduct watershed, which is the primary source of water for the County. The County is also located in the Central Valley Project watershed, which is the primary source of water for the County.

LAND RESOURCES

The County is located in the Central Valley, which is a major agricultural region. The County is primarily composed of agricultural land, which is used for the production of crops such as grapes, almonds, and pistachios. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

FOREST RESOURCES

The County is located in the Central Valley, which is a major agricultural region. The County is primarily composed of agricultural land, which is used for the production of crops such as grapes, almonds, and pistachios. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

WILDLIFE RESOURCES

The County is located in the Central Valley, which is a major agricultural region. The County is primarily composed of agricultural land, which is used for the production of crops such as grapes, almonds, and pistachios. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project. The County is also home to some of the most beautiful scenery in the State, including the San Joaquin River and the Central Valley Project.

CHAPTER VIII

NATURAL RESOURCES

CHAPTER VIII

NATURAL RESOURCES

INTRODUCTION

Patterson's natural resources--its water, agricultural lands, soils, vegetation, wildlife, and air--contribute to the city's economy and are key elements in the quality of life of Patterson's residents. This chapter inventories and assesses the area's natural resources.

WATER RESOURCES

The quantity, quality, and availability of water is vital to both natural processes and human activities within any urban area. Water is essential to the development of housing, commerce, industry and agriculture, to recreation, and to the maintenance of high quality fish and wildlife habitats.

The Planning Area is bordered on the east by the San Joaquin River. The California Aqueduct and Delta-Mendota Canal run near the western edge of the Planning Area. Salado Creek and numerous irrigation canals pass through the Planning Area. These water resources are shown in Figure VIII-1. Patterson also receives its potable water supply from the underlying groundwater basin.

Precipitation

The climate of the San Joaquin Valley is characterized by hot summers and cool rainy winters. During the summer months the San Joaquin Air Basin is influenced by a high pressure cell off the west coast. Within this cell, air descends almost continuously; the descending air is compressed, thereby raising its temperature and lowering the relative humidity. When this cell is dominant, there are no major storms nor any regionwide precipitation. During the winter the influence of this high pressure cell is intermittent, resulting in alternate periods of stormy, unsettled weather and periods of stable, rainless conditions.

The mean annual precipitation for Patterson is 10.68 inches. Most of the precipitation occurs from December to April; summer months are virtually rainless. Occasionally, Patterson receives rain during the summer months from thunderstorms.

San Joaquin River

The San Joaquin River is located on the eastern edge of the Planning Area. The San Joaquin River provides water for agricultural, industrial processes, warm freshwater habitat for aquatic resources, habitat for fish spawning, migration routes for anadromous or other fish species, water supply and vegetative habitat for the maintenance of wildlife, and water and nonwater contact recreation.

The watershed of the San Joaquin River is the southern San Joaquin Valley, which encompasses 11,000 square miles, extending west from the Sierra Nevada crest to the Coast Ranges, and south from the San Joaquin Delta to the drainage dividing the San Joaquin and Kings Rivers. Principal tributaries of the San Joaquin River include the Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno Rivers. All of these rivers are regulated by reservoirs.

The main stem of the San Joaquin River originates high in the Sierra Nevada crest and flows westerly to Millerton Lake, which is impounded by Friant Dam. Releases in the San Joaquin system flow north toward Stockton. At Friant Dam, a major portion of the flow is diverted into the Central Valley Project canal system operated by the U.S. Bureau of Reclamation (USBR). The segment of the river from the Merced River confluence to Mossdale, near Manteca, is characterized by high flows resulting from the Merced, Tuolumne, and Stanislaus River inflows, although streamflow in the valley during the summer consists mostly of irrigation return flows.

Water quality monitoring and flow for the San Joaquin River in the Patterson Area is conducted at the Vernalis stream station, located about 15 miles downstream from Patterson. The nearest station upstream from Patterson is located near Newman but this station does not have water quality monitoring capabilities.

Streamflow in the San Joaquin River (at Vernalis), averaged about 2,911 cubic feet per second (cfs) in 1985. Streamflow varies dramatically throughout the year. It is highest during winter and spring and lowest in late summer and fall. Maximum flow in 1985 was 5,790 cfs and minimum flow was 1,280 cfs.

San Joaquin River Water Quality

Waters at high elevations originate as snow melts and are of excellent quality, but irrigation drainage and waste discharges flowing into rivers on the valley floor continuously degrade water quality. Dissolved salts and nutrients in agricultural return flows, along with seep age from municipal and industrial percolation ponds, are the sources of water quality degradation. Low flows resulting from upstream diversion and regulation have virtually eliminated salmon runs in the basin streams and are endangering marshland wildlife.

Every two years, the State Water Resources Control Board (SWRCB) prepares an assessment of water quality of California streams and lakes. This assessment is based on data collected by the SWRCB and the the State Department of Fish and Game. Those rivers and streams whose water quality is considered below basin plan objectives and/or water quality criteria established by EPA, are considered water quality-limited.

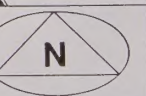
The segment of the river from Vernalis to the Stockton ship channel has been identified as a water quality-limited segment. Total dissolved solids exceed basin plan objectives, and dissolved oxygen is depressed along this stretch. Fish tested from the Vernalis station in 1985 showed high concentrations of synthetic organic compounds consisting of chlordane, DDT, PCB, and toxaphene, as well as detectible concentrations of arsenic, silver, cadmium, chromium, copper, mercury, nickel lead, selenium, and zinc. These chemicals and metals result primarily from agricultural return flows and discharge from urban areas.

The City of Patterson operates a wastewater treatment plant near the San Joaquin River. The City does not currently discharge effluent to the San Joaquin River, although it has a permit from the Central Valley Regional Water Quality Control Board (CVRWQCB). Treated effluent is evaporated in ponds located approximately one-half mile west of the river and, because of this distance, seepage into the river does not occur. The treatment plant treats only domestic waste at this time, and does not intend to discharge to the river until the treatment plant is operating at full capacity. Monitoring of nearby wells shows low or nonexistent bacterial counts, indicating that nearby groundwater quality has not been degraded by treatment plant operations.



Figure VIII-1
WATER RESOURCES

----- Indicates where Salado Creek is piped underground



Base Map prepared by Lew Garcia Davis July 1988

Patterson Planning Area

Salado Creek

Salado Creek originates in the Diablo Mountains south of Patterson, runs northerly through the city, and eventually drains into the San Joaquin River. Salado Creek collects drainage primarily from the Diablo Mountains. Salado Creek flows through an earth ditch from the Diablo Mountains east to the Southern Pacific Railroad lines. East of the railroad, Salado Creek is piped underground in two 36-inch pipelines to the San Joaquin River. The first pipeline was installed in 1963 to supplement the former open creek. In 1967, Salado Creek was filled in and a second pipeline was installed so that the creek bed could be farmed. One pipe starts near the Southern Pacific Railroad bridge, and the other starts at the northern end of the city and receives runoff from the city via three storm drain pipes.

During heavy storms, Salado Creek backs up and spills over its banks near the railroad culvert because the pipes are insufficient to handle the creek's flows. This leads to flooding in areas downstream along Highway 33 and Walnut Avenue. The City and County have committed funds for the U.S. Army Corps of Engineers to conduct a feasibility study to identify possible solutions to Salado Creek flooding. Flooding problems are discussed in Chapter IX, Health and Safety. Problems with the city's drainage system associated with Salado Creek are discussed in Chapter VI, "Public Facilities and Services."

No data on the water quality of Salado Creek are available from the CVRWQCB. Due to budget constraints, the CVRWQCB generally only collects data on major streams.

Groundwater

The City of Patterson and the entire San Joaquin Valley are underlain by the San Joaquin groundwater basin. Most groundwater in this basin occurs in two zones separated by the Corcoran Clay member of the Tulare Formation. The Tulare Formation consists partially of Corcoran Clay or "blue clay," an impervious layer of varying thickness that separates the upper and lower water bearing zones. In the Patterson area, Corcoran Clay is found at depths ranging from 260 feet to 304 feet below the land surface and varies in thickness from 40 feet to 60 feet.

The basin contains two water-bearing zones. The lower water-bearing zone is below the Corcoran Clay and contains confined fresh water. The upper water-bearing zone contains confined, semi-confined, and unconfined water in the upper section of the Corcoran Clay and younger deposits exclusive of the water within 25 feet of land surface. A shallow water-bearing zone is also found in the alluvium and flood-basin deposits, which contain unconfined water within approximately 25 feet of land surface. Wells in the Patterson area are drilled to the lower water-bearing zone, at depths of 280 to 560 feet below the land surface.

The groundwater levels of the upper water-bearing zone are relatively high throughout the Planning Area. However, groundwater elevations fluctuate from season to season. The Department of Water Resources (DWR) annually maps groundwater elevations in the Patterson area. In spring 1986, groundwater elevations in the Patterson area ranged from 50 feet to 60 feet mean sea level (MSL). Increases result from recharge due to precipitation, percolation, and snowmelt. Primary groundwater recharge areas are located on the east side of the San Joaquin River, although some recharge occurs from the San Joaquin River and the Diablo Mountains to the west of the Planning Area, as well as from agricultural irrigation. In non-drought years, groundwater withdrawal in the Planning Area is negligible because it is not the primary source of agricultural irrigation water.

Groundwater on the west side of the San Joaquin River has been described as substantially different from that of the east side of the river. Three major problems have been identified on the West side: a rising perched water table, saline buildup in the soil, and a drop in the water table during drought years. The perched, or high water table, has historically been the most significant problem in the Planning Area. This is the shallow layer of water that in high water years and during irrigation season can rise to as much as three to five feet above the land surface. This causes problems for field crops and orchards that cannot tolerate wet or saturated soils. The U.S. Soil Conservation Service (SCS) monitors observation wells during irrigation season in the areas known to have the greatest problem, especially the southeastern portion of the Planning Area. For years this problem has been successfully mitigated with the installation of underground tiles, which have effectively lowered the water table in those areas.

The second problem, high salinity, often exists in areas with perched water tables, and concentrations of 2,000 parts per million, by volume (ppm) of chloride have been detected in the Planning Area. High saline concentrations in both the perched water table and soils cannot be tolerated by most plants, thus making agriculture in those areas virtually impossible.

The third problem, and perhaps the most serious one, is the lowering of the water table during drought years. During the 1976-77 drought, the U.S. Bureau of Reclamation limited farmers' use of surface water by as much as 75 percent. As a result, many farmers were forced to use their deep wells to irrigate, which led to a serious drawdown in groundwater levels. The extensive use of groundwater caused some wells within the Planning Area to go dry. This occurred not only in Patterson, but all over the West side. Patterson's wells draw water from the lower aquifer, but many private domestic wells in the outlying rural areas drill to less than 100 feet.

Since the 1976-77 drought, the SCS has monitored wells in late winter and after the irrigation season, which is usually October. This monitoring has enabled the SCS to watch water table levels and determine potential areas of overdraft. Although 1987-88 has been a drought year, surface water supplies to irrigation districts in the Planning Area have not been curtailed. The SCS predicts that the water table may lower if the current drought continues in the 1988-89 season.

Groundwater Quality

Groundwater quality in the Patterson area is generally considered good. In 1984, wells were sampled in the City for organic chemicals, as required by state law. Results from one well sampled at 360 feet indicated that no organic chemicals were detected. The five City wells, which range in depth from 280 feet to 560 feet, were also sampled in 1986 for minerals and inorganics.

Water hardness is a measure of the mineral content of the water supply. As mineral content increases, hardness also increases. Water quality of the Patterson area groundwater can be characterized as a sodium sulphate based water. Results of water quality collected in August 1986 from City well No. 5 show that groundwater has a high sodium sulphate content and is slightly alkaline.

Water Use

Water is used in the Planning Area for residential, commercial, industrial, and agricultural purposes. Domestic wells provide the potable water supply for the Planning Area. The City's water system and demand are described in Chapter VI, "Public Facilities and Services."

AGRICULTURAL SOILS AND RESOURCES

Agriculture constitutes a major portion of Stanislaus County's economic base. Approximately 782,786 acres were harvested in the county during 1987.

Agriculture is also the predominant land use in the Planning Area. Dry beans, green beans, apricots, tomatoes, and mixed melons are the primary commodities, with spinach and peas also playing an important role. Figure VIII-2 indicates the predominant agricultural crops in the Planning Area based on a survey performed by the California Department of Water Resources in 1981. Due to crop rotation and changes in demand for specific agricultural products, crops and orchards frequently change. Thus, Figure VIII-2 serves as a general indication of agricultural patterns in the Planning Area but may not reflect actual crops in 1988.

In 1985, agriculture supported approximately 16.5 percent of the industry in Patterson and was responsible for approximately 16 percent of the City's employment. The three largest nonmanufacturing firms in Patterson are agriculturally related. The largest employer is a food processing plant.

Soils

The Planning Area consists almost exclusively of soils that are well suited for agricultural production. Figure VIII-3 shows soil types as classified by the University of California for the western Stanislaus area. Table VIII-1 presents a summary of the soil types and their Storie index rating and soil grade.

Runoff from all soils in the Planning Area is slow, except for the steeper sloped area in the western portion, where runoff is more rapid. Soil permeability ranges from slow to rapid and the hazard of wind erosion is slight.

Storie Index Rating

Soils in the Planning Area are rated according to the Storie Index (1 through 7). This index expresses numerically the relative degree of suitability of a soil for general intensive agriculture. The rating is based on soil characteristics only and is obtained by evaluating such factors as depth of soil to layers restrictive to root and water penetration, texture of the surface soil, density and texture of the subsoil, drainage, salts and alkali, and surface relief. Other factors, such as availability of water for irrigation, climate, and distance from markets, that might determine the desirability of growing certain plants in a given locality, are not considered. Therefore, in itself, the index cannot be considered as an index of land value. It does, however, provide a rational base to which economic and environmental factors may be coupled for comparative land evaluation.

Four general factors are considered in the index rating. These factors are (1) the characteristics of the soil profile and soil depth; (2) the texture of the surface soil; (3) slope or surface relief of the soil; and (4) other factors, such as drainage, salts and alkali, nutrient level (fertility), and microrelief. Each of these four general factors is evaluated on a percentage basis. A rating of 100 percent expresses the most favorable, or ideal condition, and lower percentage ratings are given for conditions that are less favorable for crop production.

For simplification, soils are placed in grades according to their general suitability for intensive agriculture as shown by their Storie Index ratings. The six grades and their range in Storie Index ratings are shown below.

<u>Grade</u>	<u>Storie Index</u>
1	80 to 100
2	60 to 80
3	40 to 60
4	20 to 40
5	10 to 20
6	less than 10

Soils of Grade 1 are excellent, or well suited to general intensive agriculture. Grade 2 soils are good and are also well suited to general intensive agriculture, although they are not so desirable as soils of Grade 1. Grade 3 soils are only fairly well suited. Grade 4 soils are poorly suited, and Grade 5 soils are very poorly suited. Grade 6 consists of soil and land types that are not suited to agriculture.

Although soils falling into grades 3, 4, and 5 are less desirable for general intensive agriculture, some may be highly desirable for certain crops because of special adaptation of the crop, or culture of the crop, to certain soil characteristics. For example, level, fine-textured, poorly-drained soils in Grade 4 may be much more desirable for rice culture than level, medium-textured, permeable soils in Grade 1. The Storie Index rating and soil grade for soils in the Planning Area are given in Table VIII-1.

Land Capability

The U.S. Soil Conservation Service (SCS) is the primary source of information concerning the suitability of soils for agricultural use. The SCS has developed a "Land Capability Classification System" that organizes soils into eight categories designated by Roman numerals. Arable lands are organized into Classes I through IV. Nonarable lands are those unsuited for long-term cultivation. Classes V through VIII contain nonarable lands.

The SCS also uses another soils classification system: the "Important Farmland Inventory (IFI). The IFI is being used by the California Department of Conservation's Farmland Mapping and Monitoring Program. This program provides a source of information for state and local agencies concerned with agricultural land conversion. The IFI identifies four farm land categories: prime land, additional farmland of statewide importance, unique farmland, and additional farmland of local importance. The Prime Farmland designation is based on such factors as the availability of a reliable water supply, the area's temperature range, depth of the water table, soil permeability, and other considerations. Generally, soils receiving a Class I or II rating under the Land Capability Classification System are designated as IFI Prime Farmland. Much of the Planning Area is potentially IFI Prime Farmland.

Soil mapping for the Land Capability Classification System has been completed in Stanislaus County. Figure VIII-3 shows the Land Capability Classification for soils in the Planning Area. The Planning Area contains Classes I, II, III, and IV, although Classes I and II are predominant. IFI mapping has not been completed for western Stanislaus County.

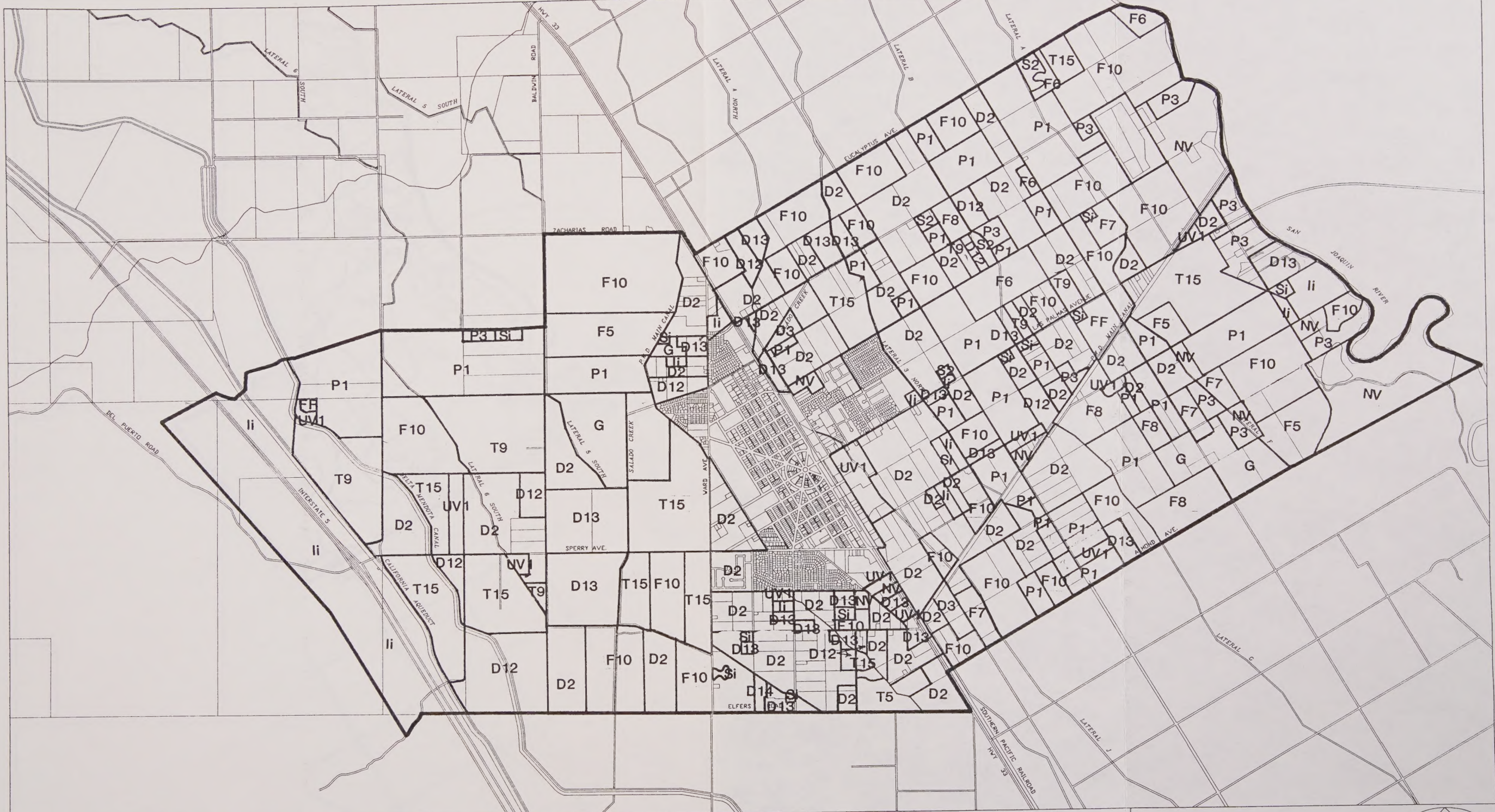


Figure VIII-2
PREDOMINANT AGRICULTURAL CROPS

Deciduous Fruits and Nuts

D2 Apricots
D3 Cherries
D12 Almonds
D13 Walnuts
D14 Pistachios

Field Crops

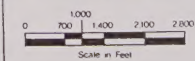
F5 Sugarbeets
F6 Corn
F7 Sorghum

Truck Crops

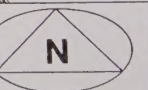
F8 Sudan
F10 Beans
T5 Not Defined
T9 Melons, Squash
T15 Tomatoes

Miscellaneous

UV1 Urban, Vacant
Si Farmsteads
P1 Alfalfa
P3 Pasture
G Grain
li Idle
NV Native Vegetation
FF Fallow
S2 Feedlots



Base Map prepared by Lew Garcia Davis, July 1988



**Patterson
Planning Area**

Soils in the Planning Area that are categorized as Class I or II soils consist primarily of the Vernalis-Salado-El Solyo Association and the Myer-Stomar Association. These soils include approximately 90 percent of the soils in the Planning Area and have few limitations restricting their use. Class III soils occur in isolated areas near the San Joaquin River. These soils have severe limitations that reduce the choice of plants or require special conservation practices.

Class IV soils occur primarily along the I-5 corridor, and their uses are restricted because most orchard fruit, nut, vine, and vegetable crops cannot be grown. Steep slopes, restricted depth, hardpan layers, coarse texture and poor drainage, saline-alkali slow permeability, and low water-holding capacity limit the uses of these soils.

Williamson Act

The California Land Conservation Act (Williamson Act), California Government Code Sections 51290 et seq., encourages conservation of agricultural lands by providing a tax incentive to land owners who contract with the County to restrict land uses to agriculture and compatible uses. Approximately half of the land in the Planning Area is currently restricted to agricultural use under Williamson Act contracts. Figure VIII-4 shows the parcels under Williamson Act contracts in the Planning Area. In recent years, owners of some of the Williamson Act parcels have filed for non-renewal, which begins a nine-year phase out period.

Agricultural Water Supply

A second principal factor for agricultural productivity is the availability of water. Three water districts serve the Planning Area: the Patterson Water District, West Stanislaus Irrigation District, and the Del Puerto Water District. These water districts and their water supplies are discussed in Chapter VI, "Public Facilities and Services."

TABLE VIII-1

LIST OF SOIL TYPES AND RATINGS IN THE PLANNING AREA

<u>Soil Abbreviation</u>	<u>Soil Name</u>	<u>Storie Index Rating</u>	<u>Soil Grade</u>
Ve9	Vernalis loam, 0-1% slopes	100	1
Sd2	Salado fine sandy loam, 0-2% slopes	100	1
Sd5	Salado loam, 0-2% slopes	100	1
Ve15	Vernalis silt loam, 0-1% slopes	95	1
Ve3	Vernalis clay loam, 0-1% slopes	85	1
Co2	Columbia fine sandy loam, 0-1% slopes	85	1
St4	Stomar loam, 0-1% slopes	85	1
Za2	Zacharias clay loam, 0-1% slopes	81	1
Ve7	Vernalis gravelly loam, 0-1% slopes	80	1
Dn2	Dinuba fine sandy loam, 0-1% slopes	77	2
Za5	Zacharias gravelly clay loam, 0-1% slopes	76	1
Za6	Zacharias gravelly loam, 0-1% slopes	76	2
Za8	Zacharias clay loam, 0-1% slopes	76	2
Es2	El Solyo silty clay loam, 0-1% slopes	73	2
Ar2	Arbuckle clay loam, 0-2% slopes	73	2
My6	Myers clay loam, 0-2% slopes	72	2
Ve2	Vernalis clay, 0-1% slopes	70	2
St2	Stomar fine sandy loam, 0-2% slopes	68	2
Sd3	Salado fine sandy loam, sand substratum, 0-2% slopes	67	2
Ve4	Vernalis clay loam, water table, 0-1% slopes	60	2
Ca2	Camarillo clay loam, 0-1% slopes	57	3
My3	Myers clay, loamy substratum, 0-2% slopes	57	3
My2	Myers clay, 0-2% slopes	51	3
Co6	Columbia fine sandy loam, water table, 0-1% slopes	50	3
Te6	Temple loam, water table, 0-1% slopes	48	3
My5	Myers clay, moderately well drained, 0-2% slopes	46	3
Co4	Columbis fine sandy loam, channeled	45	3
Co5	Columbia fine sandy loam, clay substratum, water table, 0-1% slopes	43	3
Te3	Temple clay loam, water table, 0-1% slopes	40	3
Sa4	Sacramento silty clay loam, 0-1% slopes	38	4
Me4	Merced clay loam, 0-1% slopes	36	4
Co7	Columbia soils, channeled	35	4
Cc2	Capay clay, 0-1% slopes	32	4
Sa2	Sacramento silty clay, 0-1% slopes	30	4
Cc3	Capay clay, water table, 0-1% slopes	25	4
Me3	Merced clay, 0-1% slopes	21	4
Rh	Riverwash	< 10	6

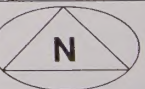
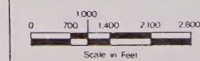
Source: University of California, Davis, and Stanislaus County, *Soils of Westside Stanislaus Area, California* by J.C. McLaughlin and G.L. Huntington, 1968.



Figure VIII-4
LANDS UNDER WILLIAMSON ACT CONTRACT

-  Prime Land Under Contract
-  Non-prime Land Under Contract

Source: Stanislaus County Planning Department, 1987-88.



Base Map prepared by Lew Garcia Davis, July 1988

Patterson Planning Area

VEGETATION AND WILDLIFE RESOURCES

Plant and animal resources in the Planning Area occur in both natural and altered habitats. Natural habitats constitute less than five percent of the Planning Area and include the following vegetation and habitat types: riparian, river channels, and valley grassland. Natural habitats associated with water are found primarily along the San Joaquin River. Valley grassland vegetation is scattered throughout the Planning Area.

Altered habitats include cultivated and residential areas. More than 90 percent of the Planning Area is either cultivated or grazed, and approximately 4 percent is urbanized. Although subject to human disturbance, these altered areas may still be valuable for wildlife.

Habitat Types

Five major habitat types have been identified in the Planning Area. These habitats are shown in Figure VIII-6. Characteristics of the five habitats and the kinds of vegetation and wildlife resources associated with each are described below. Tables VIII-2 and VIII-3 give the scientific names of plant and animal species discussed in this section.

Riparian

Riparian shrublands and woodlands are water-dependent habitats that occur along levees and banks of waterways. North of the Las Palmas Avenue bridge on the San Joaquin River, the riparian vegetation consists of a narrow corridor of red willow with an occasional Fremont's cottonwood inside the levee. The understory consists of herbaceous plants and nonnative grasses. An oak woodland savanna community occurs north of the bridge and south of Olive Avenue along the San Joaquin River. This area is primarily open grassland, with scattered mature valley oaks.

Birds observed north of the bridge include great blue heron, great egret, Swainson's hawk, red-tailed hawk, mourning dove, Anna's hummingbird, downy woodpecker, Nuttall's woodpecker, western kingbird, Cassin's kingbird, black phoebe, brown-headed cowbird, and house finch.

South of the Las Palmas Avenue bridge, the riparian vegetation is more extensive than to the north. The oxbow at the south end of the Planning Area has a broad riparian woodland. Midway between the oxbow and bridge is a large stand of riparian woodland. These larger stands have a denser upper story of Fremont's cottonwoods, red willow, and, to a lesser degree, valley oaks than the downstream portion of the river. The understory includes willow shrubs and an occasional tree tobacco. The rest of the river bank supports open grassland and a narrow corridor of riparian woodland.

Birds observed south of the bridge include those mentioned above and also black-shouldered kite, California quail, Caspian tern, ash-throated flycatcher, European starling, house wren, and Brewer's blackbird.

Mammals that can be expected to be found in the riparian habitat are hoary bat, striped skunk, raccoon, mink, and Botta's pocket gopher. Several reptiles and amphibians are also likely to occur, including western fence lizard, valley garter snake, Pacific gopher snake, Pacific treefrog, and western toad.

River Channel

The river channel provides open water for many species of birds. Shallow water provides foraging habitat for shorebirds and wading birds, including great blue heron, great egret, killdeer, and spotted sandpiper. Deep water provides foraging habitat for Caspian and Forrester's terns and various species of gulls.

Valley Grasslands

Valley grasslands in the Planning Area occur along the San Joaquin River on lands not occupied by riparian vegetation, wetlands, or agricultural fields. Grasslands also occur in the foothills of the inner Coast Range along the western edge of the Planning Area. Valley grasslands are dominated by many species of nonnative grasses and other herbaceous plants. Native species are also present but are now less abundant than they once were. Common plants of this habitat include bromes, wild oats, wild barley, and filaree.

Wildlife using valley grasslands include raptors (e.g., black-shouldered kite, northern harrier, Swainson's hawk, red-tailed hawk, American kestrel), songbirds (western kingbird, yellow-billed magpie, American crow, loggerhead shrike, and western meadowlark), and many others.

TABLE VIII-2

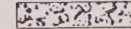
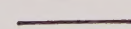
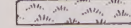
SCIENTIFIC NAMES OF PLANT SPECIES MENTIONED IN THE TEXT

<u>Common Name</u>	<u>Scientific Name</u>
Blackberries	<i>Rubus</i> sp.
Bromes	<i>Bromus</i> sp.
Delta coyote-thistle	<i>Eryngium racemosum</i>
Diamond-petaled California poppy	<i>Eschscholtzia rhombipetala</i>
Elderberry	<i>Sambucus</i> sp.
Filaree	<i>Erodium</i> sp.
Fremont's cottonwood	<i>Populus fremontii</i>
Red willow	<i>Salix laevigata</i>
Tree tobacco	<i>Nicotiana glauca</i>
Valley oak	<i>Quercus lobata</i>
Wild barley	<i>Hordeum</i> sp.
Wild oat	<i>Avena fatua</i>
Wild rose	<i>Rosa</i> sp.

Source: Jones and Stokes Associates

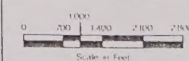


Figure VIII-5
HABITAT AREAS

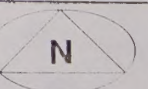
-  Riparian vegetation
-  River channel
-  Valley grassland

-  Agricultural area
-  Urban area

Source: Jones & Stokes Associates, 1988.



Scale in Feet
Dist. Map prepared by Lew Garza Davis, July 1988



Patterson Planning Area

TABLE VIII-3

SCIENTIFIC NAMES OF WILDLIFE SPECIES MENTIONED IN TEXT

<u>Common Name</u>	<u>Scientific Name</u>
Invertebrates	
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>
Amphibians	
Western toad	<i>Bufo boreas</i>
Pacific treefrog	<i>Hyla regilla</i>
Reptiles	
Blunt-nosed leopard lizard	<i>Gambelia silus</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
Gopher snake	<i>Pituophis melanoleucus</i>
Giant garter snake	<i>Thamnophis couchi gigas</i>
Birds	
Great blue heron	<i>Ardea herodias</i>
Great egret	<i>Casmerodius albus</i>
Aleutian Canada goose	<i>Branta canadensis leucopareia</i>
Black-shouldered kite	<i>Elanus caeruleus</i>
Northern harrier	<i>Circus cyaneus</i>
Sharp-shinned hawk	<i>Accipiter striatus</i>
Cooper's hawk	<i>Accipiter cooperii</i>
Swainson's hawk	<i>Buteo swainsoni</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
American kestrel	<i>Falco sparverius</i>
Merlin	<i>Falco columbarius</i>
California quail	<i>Callipepla californica</i>
Greater sandhill crane	<i>Grus canadensis tabida</i>
Killdeer	<i>Charadrius vociferus</i>
Spotted sandpiper	<i>Actitis macularia</i>
Caspian tern	<i>Sterna caspia</i>
Forster's tern	<i>Sterna forsteri</i>
Mourning dove	<i>Zenaida macroura</i>
California yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>
Burrowing owl	<i>Athene cunicularia</i>

Continued on next page

TABLE VIII-3

SCIENTIFIC NAMES OF WILDLIFE SPECIES MENTIONED IN TEXT (Continued)

<u>Common Name</u>	<u>Scientific Name</u>
Birds (continued)	
Short-eared owl	<i>Asio flammeus</i>
Anna's hummingbird	<i>Calypte anna</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Downy woodpecker	<i>Picoides pubescens</i>
Black phoebe	<i>Sayornis nigricans</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Cassin's kingbird	<i>Tyrannus vociferans</i>
Western kingbird	<i>Tyrannus verticalis</i>
Scrub jay	<i>Aphelocoma coerulescens</i>
Yellow-billed magpie	<i>Pica nuttalli</i>
American crow	<i>Corvus brachyrhynchos</i>
House wren	<i>Troglodytes aedon</i>
American robin	<i>Turdus migratorius</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
European starling	<i>Sturnus vulgaris</i>
Yellow-rumped warbler	<i>Dendroica coronata</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Western meadowlark	<i>Sturnella neglecta</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
House finch	<i>Carpodacus mexicanus</i>
Mammals	
Virginia opossum	<i>Didelphis virginiana</i>
Hoary bat	<i>Lasiurus cinereus</i>
Riparian brush rabbit	<i>Sylvilagus bachmani riparius</i>
Botta's pocket gopher	<i>Thomomys bottae</i>
San Joaquin Valley woodrat	<i>Neotoma fuscipes riparia</i>
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>
Raccoon	<i>Procyon lotor</i>
Mink	<i>Mustela vison</i>
Striped skunk	<i>Mephitis mephitis</i>

Source: Jones and Stokes Associates

Agricultural Areas

Agriculture occupies most of the land within the Planning Area. The value of this habitat to wildlife depends on several factors, such as crop type, irrigation systems, pesticide use, farming practices, and the surrounding land use.

Many of the wildlife species in valley grasslands, such as western meadowlark, red-winged blackbird, and mourning dove, also use agricultural fields. Swainson's hawks favor alfalfa fields for hunting. Orchards are used by many species of songbirds, including crow, magpie, scrub jay, and others.

Urban and Developed Areas

Residential and other developed areas occupy a large portion of the Planning Area. Many species of animals use these areas, including American robin, scrub jay, yellow-rumped warbler, northern mockingbird, and Virginia opossum.

Special-Status Species

The Planning Area is located within the general geographic ranges of several plant and wildlife species that are protected under state or federal endangered species law. Several species of special concern are also found in this region.

The California Natural Diversity Database (NDDDB) (1987) has no record of state- or federally listed or candidate rare, threatened, or endangered plant or animal species in the Planning Area. A few such species have been recorded within several miles of the Planning Area, however, and some potential exists for these species to be found in the Planning Area. Table VIII-4 lists species that could potentially occur in the Planning Area, along with their legal status, and habitats. These species are discussed below.

Plants

- Delta Coyote-Thistle. The Delta coyote-thistle has been collected in lowland riparian and floodplain habitats in Merced, Stanislaus, and San Joaquin Counties. Most historic occurrences have been eliminated by flood control and agricultural activities. The species was thought for several years to be extinct, but it was found recently along the San Joaquin River in Merced County. It was also seen along the river north of the Planning Area near Grayson in 1948. No populations are known from within the Planning Area, but suitable habitat may exist.
- Diamond-Petaled California Poppy. Diamond-petaled poppy occurs in grassland habitats in the inner Coast Ranges from San Luis Obispo County to Contra Costa County. The species has declined because of grazing, competition from nonnative species, and habitat loss. It once occurred at a hillside north of the mouth of Del Puerto Canyon but has not been seen at this site since 1965 (California National Diversity Data Base 1987). This occurrence is located west of the Planning Area, but other undiscovered populations could be present in the hills near Interstate 5 along the west boundary of the Planning Area.

Animals

- Great Blue Heron. Although great blue herons are not a state- or federally listed species, they are sensitive to disturbance during the breeding season. A heron rookery is shown on Stanislaus County's biological factors map, downstream of the Planning Area. Great blue herons observed feeding in the San Joaquin River during the wildlife survey were probably from that rookery. The river and agricultural fields are probably important heron feeding areas.
- Aleutian Canada Goose. Aleutian Canada geese winter in the Central Valley of California. One of only several major wintering areas occurs at the junction of the Tuolumne and San Joaquin Rivers, near Modesto. These geese feed in pastures and grain fields in agricultural areas. Although not known to occur in the Planning Area, the Modesto birds could feed in the agricultural fields.
- Swainson's Hawk. Several known Swainson's hawks occur north and south of the Planning Area). The NDDDB (1987) has no record of this species in the Planning Area.

Three Swainson's hawks were observed during the wildlife surveys, two north of the Las Palmas Avenue bridge on the San Joaquin River, and one south of the bridge. At least two nesting territories may occur in the Planning Area. Trees suitable for nesting were present in the oak woodland-grassland area north of Las Palmas bridge (near where the pair of Swainson's hawks were observed) and in two extensive riparian areas south of the bridge. No nests were found during the wildlife survey, but they are often difficult to locate because they are placed within dense foliage.

The Planning Area contains suitable foraging areas in alfalfa, hay, and wheat fields. These crops occur near suitable nest trees. Loss or crop conversion of alfalfa fields could reduce foraging habitat for these birds. In addition, a loss of riparian trees (cottonwoods and valley oaks) could eliminate nests or reduce nest tree availability.

- Greater Sandhill Crane. The Planning Area is located within the wintering range of the greater sandhill crane. Although this is not a major wintering area, these birds may stop and forage in agricultural fields. The wildlife survey was conducted after the cranes migrated out of the valley, so crane use of the area could not be determined.
- Western Yellow-Billed Cuckoo. Yellow-billed cuckoos require stands of willow-cottonwood forest greater than 25 acres in extent and wider than 300 feet. No habitat in the Planning Area meets these criteria. No cuckoos were found during the wildlife survey.

TABLE VIII-4
SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

<u>Species</u>	<u>Legal Status</u> ¹	<u>Potential Habitats in Planning Area</u>	<u>Potential for Regular Occurrence</u>
Delta coyote thistle	C2, SE	riparian, floodplain	low
Diamond-petaled California poppy	C2	grassland hills	low
Valley elderberry longhorn beetle	FT	mixed riparian woodland	low
Swainson's hawk	C2, ST	mixed riparian woodland, annual grassland	high
Cooper's hawk	SSC	mixed riparian woodland, savanna	moderate
Sharp-shinned hawk	SSC	mixed riparian woodland, savanna	moderate
Merlin	SSC	mixed riparian woodland, oak savanna, grassland	low
Northern harrier	SSC	annual grassland	low to moderate
Short-eared owl	SSC	annual grassland	low
Burrowing owl	SSC	annual grassland	low
Aleutian Canada goose	FE	grain crops	low
Greater sandhill crane	ST	grain crops	low
Western yellow-billed cuckoo	C2, ST	riparian forest	low to none
Giant garter snake	C2, ST	wetlands, canals	low
Blunt-nosed leopard lizard	FE, SE	undisturbed open areas	low
Riparian brush rabbit	C2, SSC	riparian brush	low to none
San Joaquin Valley woodrat	C2, SSC	riparian forest	low to none
San Joaquin kit fox	FE, ST	grasslands	low
Great blue heron	None	river, agricultural lands	high

¹ FE = Federally listed as endangered
 FT = Federally listed as threatened
 C2 = Federal candidate (Category 2)
 SE = State listed as endangered
 ST = State listed as threatened
 SSC = State species of special concern

Sources: California Department of Fish and Game, 1978, 1986, 1988; Stanislaus Area Association of Governments, 1974; U. S. Fish and Wildlife Service, 1985.

- Giant Garter Snake. The Planning Area is located within the range of the giant garter snake. This snake requires marshes or canals overgrown with tules and associated grassy, open upland. Hanson and Brode (1980) found no giant garter snakes between Gustine, Merced County, and Stockton, San Joaquin County. The NDDDB (1987) has no record of this snake in the Planning Area.

Giant garter snakes could occur in the oxbow in the south end of the Planning Area, on the San Joaquin River. This area was not well covered during the wildlife survey, however, because access was not granted to all private properties.

- Blunt-Nosed Leopard Lizard. The geographic range of the blunt-nosed leopard lizard includes the Planning Area. This lizard inhabits sparsely vegetated plains, alkali flats, low foothills, grasslands, canyon floors, large washes, and arroyos. The Planning Area contains only a small amount of these habitats. The NDDDB (1987) has no record of this lizard for the area. None were observed during the wildlife survey.
- Riparian Brush Rabbit. The riparian brush rabbit is known to occur only along the lower Stanislaus River at Caswell State Park. Other small colonies may exist between Caswell State Park and the confluence of the Stanislaus and San Joaquin Rivers. The brush rabbit once occurred in northern Stanislaus County along the west side of the San Joaquin River and may still occur at other locations in suitable habitat.

The riparian brush rabbit occupies areas where wild rose, willows, and blackberries grow in dense stands along river banks. Two sites within the Planning Area on the San Joaquin River may support suitable habitat. The first, a dense willow thicket with a cottonwood overstory, is located approximately one mile south of the Las Palmas Avenue bridge. A second suitable site is at the oxbow lake at the southeast end of the Planning Area. No brush rabbits were found during field surveys. The suitable habitat at the oxbow lake, however, was not well surveyed because landowners did not grant suitable access to the property. If alteration of the riparian vegetation on the San Joaquin River is proposed, more thorough surveys should be conducted for this species.

- San Joaquin Valley Woodrat. San Joaquin Valley woodrats (a subspecies of the dusky-footed woodrat) are known only from the San Joaquin, Stanislaus, and Tuolumne Rivers in Stanislaus and San Joaquin Counties. The closest known population to the Planning Area is at Caswell State Park, San Joaquin County. Another population may occur at Corral Hollow, San Joaquin County. The closest recorded occurrence to the Planning Area is two miles northeast of Vernalis in Stanislaus County. Specific habitat requirements of the San Joaquin Valley subspecies of the dusky-footed woodrat are not well understood. The species generally occupies areas supporting a mixture of trees and brush. Woodrats nest in cavities in trees, snags, and logs, or lodges built of downed woody material.

Two sites in the Planning Area may have suitable habitat for the San Joaquin Valley woodrat. One site is the oxbow lake on the San Joaquin River, and a second site is approximately one mile south of Las Palmas Avenue bridge. The oxbow lake was not surveyed for woodrat habitat. The second site, which was surveyed, has dense willow thickets with a cottonwood overstory, but no woodrat nests were observed. The cottonwoods may not provide suitable nest cavities.

If alteration of the riparian vegetation on the San Joaquin River is proposed, more thorough surveys should be conducted for this species. Because the species is nocturnal, surveys should involve nest searches and overnight live-trapping.

- San Joaquin Kit Fox. The geographic range of the San Joaquin kit fox includes the Planning Area. The NDDDB (1987) has no record of the kit fox for the area. No extensive surveys were conducted to locate kit foxes or possible dens. If abundant prey exists in the vicinity, kit foxes could occur in uncultivated areas, canal levees, highway and railway berms, culverts under roads, and remnant drainages in agricultural areas. Little suitable habitat exists in the Planning Area, so kit foxes are not expected to occur there. More extensive surveys would be required to determine the species' status in the area.
- Valley Elderberry Longhorn Beetle. The valley elderberry longhorn beetle (VELB) requires elderberry shrubs as a host plant. The NDDDB (1987) has no record of this beetle in the Planning Area. No elderberry shrubs were located during the wildlife survey, but the oxbow on the river, a suitable area, was not surveyed. The VELB could occur in areas along the San Joaquin River not thoroughly surveyed. A more thorough survey should be conducted if alteration of the riparian habitat along the San Joaquin River is proposed.
- Wintering Raptor Species of Special Concern. Four species of raptors designated by DFG as species of special concern could occur in the Planning Area during the winter, including Cooper's hawk, sharp-shinned hawk, merlin, and short-eared owl. No surveys were conducted during the winter to determine their status in the Planning Area. These raptors could use the riparian habitat along the San Joaquin River and adjacent grasslands and agricultural lands for foraging. The merlin and owl are not expected to use the Planning Area on a regular basis.
- Breeding Raptors of Special Concern. The breeding ranges of burrowing owls and northern harriers include the Planning Area. Northern harriers breed in undisturbed grasslands and marshes. Grasslands constitute a small percentage of the Planning Area, and no marshes were located. Therefore, harriers probably do not breed in the area.
- Burrowing owls occur in dry, open grasslands and in agricultural areas if breeding sites are undisturbed. This owl may occur with ground squirrels in the grasslands, agricultural areas along irrigation canals, and levees. No burrowing owls were observed during the wildlife survey, but they could have occurred and been missed because the surveys were not extensive. Development in grasslands and in agricultural fields could result in a significant impact on this species. Ground squirrel control programs could also be detrimental.

AIR RESOURCES

The city of Patterson lies within the San Joaquin Valley Air Basin, which is bounded by the coastal mountain ranges on the west and the Sierra Nevada range on the east. The Carquinez Strait is a sea level gap in the coastal range; the strait lies approximately 70 miles northwest of the Planning Area, and the intervening terrain is flat. The prevailing wind direction in the Planning Area is from the northwest, owing to marine breezes through the Carquinez Strait. During winter the sea breeze diminishes. Table VIII-5 presents climatological data for Stanislaus County.

TABLE VIII-5

CLIMATOLOGICAL DATA FOR PATTERSON

<u>Period</u>	<u>Average Temperature (°F)</u>			<u>Average Rain (inches)</u>
	<u>Minimum</u>	<u>Mean</u>	<u>Maximum</u>	
January	34	43	52	5.56
April	43	61	79	1.31
July	57	77	97	.27
October	48	66	84	3.54
Year	47	62	77	10.68

Source: Patterson Chamber of Commerce, 1988.

Emissions

Urban emission sources in the Stanislaus County area are a primary source of two existing air quality problems. Federal and state air quality standards for ozone and carbon monoxide (CO) have been exceeded in Stanislaus County. As a consequence, Stanislaus County has been designated as a "nonattainment area" with respect to the federal ozone and CO standard. Table VIII-6 summarizes air quality data in Stanislaus County for 1984, 1985, and 1986. Data for 1987 has not been published yet, nor has data from the monitoring station at Crows Landing (five miles south of Patterson) established in 1987.

Table VIII-7 lists the sources of emissions that contribute to the ozone and CO air quality problems. The data are disaggregated by emission source category.

TABLE VIII-6

SUMMARY OF AIR QUALITY MONITORING DATA FOR STANISLAUS COUNTY

<u>Monitoring Station</u>	<u>Parameter</u>	<u>Carbon Monoxide</u>			<u>Ozone</u>		
		<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Modesto: 14th Street	Peak hour value ^a	15.0	15.0	18.0	0.14	0.14	0.13
	Peak 8-hour value ^a	8.4	11.0	11.3	N/A	N/A	N/A
	Days above standard ^b	0	2	4	4	3	2
Turlock: Monte Vista	Peak hour value ^a				0.16	0.15	0.12
	Peak 8-hour value ^a				N/A	N/A	N/A
	Days above standard ^b				11	8	0

^aPeak hour and peak 8-hour values given as parts per million by volume (ppm).

^bFor ozone, days with peak 1-hour value exceeding federal primary standard of 0.12 ppm; for carbon monoxide, days with a peak 8-hour average value exceeding the federal primary and state standards of 9 ppm.

Source: California Air Resources Board (1984-1986).

TABLE VIII-7

1985 EMISSIONS FOR STANISLAUS COUNTY IN AVERAGE ANNUAL TONS PER DAY

<u>Source Category</u>	<u>Reactive Organic Gases</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide</u>
No control	4.6	1.19	40.69
Fuel combustion	0.45	10.21	1.35
Surface coating	1.55	0.00	0.00
Solvent use	4.06	--	--
Gasoline distribution	0.63	--	--
Pesticides	6.7	--	--
Aerosol propellant	0.67	--	--
On-road mobile source	13.64	22.54	128.11
Off-road mobile source	3.48	6.3	25.17
Controlled burning	0.04	0.1	0.6
Miscellaneous	0.28	--	--

Source: Stanislaus Area Association of Governments and the Stanislaus County Air Pollution Control District, 1987.

Air Quality Standards

The federal Clean Air Act established air quality standards for several pollutants, and requires areas that violate these standards to prepare and implement plans to achieve the standards by certain specified deadlines. The deadline for attaining both the ozone and CO standards in Stanislaus County was December 31, 1987.

Both the State of California and the federal government have established a variety of ambient air quality standards. The state one-hour ozone standard is 0.10 ppm (parts per million, by volume), not to be equaled or exceeded. The federal one-hour ozone standard is 0.12 ppm, not to be exceeded more than three times in any three-year period.

The County did not achieve attainment of ozone or carbon monoxide standards as of December 31, 1987. The ozone level was 13 ppm, 1 ppm over the 12 ppm standard. Although the actions that should be taken to achieve attainment have not been determined by the County or ARB, the County has completed emissions evaluations of all smaller sources in the county, including furniture repair businesses, auto body and auto paint shops, wood strippers, and engine rebuilders.

State and federal CO standards have been set for both one-hour and eight-hour averaging times. The state one-hour CO standard is 20 ppm, while the federal one-hour standard is 35 ppm. Both state and federal standards are nine ppm for eight-hour averaging period. State and federal CO standards are phrased as values not to be exceeded more than once a year.

Outdoor CO levels are a fairly reliable indicator of potential indoor CO levels. Carbon monoxide is not chemically reactive and is poorly soluble in water. Thus, it is not adsorbed on surfaces or otherwise removed from outdoor air entering a building through open doorways, open windows, or building ventilation systems.

Ozone

Ozone, the main component of photochemical smog, is primarily a summer/fall period pollution problem. Federal and state ozone standards have been periodically exceeded in parts of Stanislaus County for many years. The major contributors to regional ozone problems are motor vehicle emissions and evaporation of various organic compounds (fuels, solvents, etc.).

Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions involving other compounds (various organic compounds, nitric oxides, and nitrogen dioxide) which are directly emitted. The time required for these reactions allows the reacting compounds to be spread over a large area, which produces a regional pollution problem. Ozone problems are the cumulative result of regional development patterns, rather than the result of a few incrementally significant emission sources.

The ozone standard has been violated at both of the Stanislaus County ozone monitoring stations that have been operated since 1984. The ozone standard was violated 11 days in 1984 and on eight days in 1985, at the Monte Vista station in Turlock. There were, however, no violation days at this station in 1986.

Carbon Monoxide

Carbon monoxide is primarily a winter period pollution problem. Motor vehicle emissions are the dominant source of CO in most areas. As a directly emitted pollutant, transport away from the emission source is accompanied by dispersion and reduced pollutant concentrations. Consequently, CO problems are usually rather localized, often resulting from a combination of high traffic volumes and significant traffic congestion.

The federal and state eight-hour CO standards have been exceeded up to four days per year at the 14th Street monitoring station in Modesto. The monitoring station in Turlock was not equipped to monitor CO.

CO problems typically occur in the vicinity of major traffic arteries with significant amounts of commercial development. The presence of significant commercial development is probably an important contributing factor for two reasons. Parking lots for such developments represent a localized source of emissions which augments the CO emissions from vehicle traffic on adjacent roadways. Additionally, vehicles leaving major parking lots are likely to be in a "cold start" operating mode, resulting in higher CO emission rates than is typical for "through" traffic on major roadways.

Meteorological conditions also affect the development of CO problems significantly. High CO levels develop primarily during winter months when periods of light winds or calm conditions combine with the formation of ground level temperature inversions (typically in the evening through early morning period). These conditions result in reduced dispersion of vehicle emissions, allowing CO problems to develop and persist during hours when traffic volumes are declining from peak levels. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

Particulate Matter

Particulates are composed of smoke, dust, soot, pollens, and aerosols. The primary source of particulate emissions in Stanislaus County are from agricultural tillage and harvesting.

State and federal standards for suspended particulate matter have been set for two time periods: a 24-hour average and an annual geometric mean of the 24-hour values. Until recently, the federal and state particulate matter standards applied to a broad range of particle sizes.

Health concerns associated with suspended particles focus on those particles small enough to reach the lungs when inhaled. Few particles larger than 10 microns in diameter (one micron is about 0.00004 inches) reach the lungs. Consequently, both the federal and state air quality standards for particulate matter have been revised to apply only to these small inhalable particles (generally designated PM_{10}).

The State PM_{10} standards are 50 micrograms per cubic meter as a 24-hour average and 30 micrograms per cubic meter as an annual geometric mean. The federal PM_{10} standards are 150 micrograms per cubic meter and 50 micrograms per cubic meter as an annual geometric mean.

It is questionable whether Stanislaus County is in attainment of PM_{10} . Although data from the Crows Landing monitoring station south of Patterson has not yet been published, according to the APCD, exceedence of the PM_{10} standard was recorded at this station recently. The time of exceedence was recorded during bean harvesting at a site approximately 40 feet from the

monitoring station, which could have biased the data. The data, along with pictures of dust during bean harvesting and records of the harvest, were sent to the ARB. A determination of nonattainment has not yet been made. This is the only violation recorded in the county and no action is being taken as of August 1988.

Point Sources

There are two recent major point sources of pollution located near Patterson: a plant which burns tires to generate electricity located in Westley, about five miles north of Patterson, and a waste-to-energy plant under construction west of Crows Landing. The tire-burning plant is monitored at least three times a week and all emissions are recorded every six minutes. According to the APCD, there have been no emissions violations to date. A monitoring station is currently under construction near Westley to be completed in early 1989. This station will record daily emissions of nitrogen oxides, sulfur oxides, carbon monoxide, carbon dioxide, ozone, and particulates.

The waste-to-energy plant will burn municipal solid waste to generate electricity. When completed in late 1988, this plant will also be equipped to monitor and record emissions data at least three times per week.

MINERAL RESOURCES

The Planning Area is not characterized with the soils or topography associated with mineral resources. No mineral-bearing geologic formations or sediments of economic value are known to exist.

FINDINGS

- Water quality in the San Joaquin River has been degraded by urban runoff and agricultural irrigation water, which has reduced the suitability of this water for agricultural and domestic use. Poor water quality may limit the ability of the City to discharge sewage effluent to the river in the future.
- The city receives its potable water supplies from the groundwater basin. The groundwater levels underlying the Planning Area are relatively high, however, groundwater elevations fluctuate from season to season.
- Three major problems have been identified in western Stanislaus County: a rising perched water table, saline buildup in the soil, and a drop in the water table during drought years.
- Overdrafting of groundwater during the 1976-77 drought caused some private wells in the Planning Area to go dry. Since then, the U.S. Soil Conservation Service has monitored wells in late winter and after the irrigation season to watch water table levels and determine potential areas of overdraft. The SCS predicts that overdrafting could become a problem if the current drought continues into 1988-89.
- The Planning Area consists almost exclusively of soils that are well suited for agricultural production (Class I and II soils). A significant portion of these lands are under Williamson Act contract.
- The Planning Area supports the state-threatened Swainson's hawk, which may nest in riparian woodlands and feed in agricultural fields on the site. Loss of nesting or foraging habitat could be detrimental to the species.
- The riparian woodlands in the Planning Area provide important habitats for other wildlife species, including potentially the federally threatened valley elderberry longhorn beetle. If the beetle is present, actions that affect the beetle would require formal consultation with U.S. Fish and Wildlife Service to assure that the species is not jeopardized. Loss of riparian habitats can also impact other dependent, unlisted species.
- Several special-status plants may occur in grassland and floodplain habitats in the Planning Area. Surveys should be conducted during the proper seasons before approval of any new land-disturbing activities.
- Grassland and agricultural lands provide valuable habitats for several other special-status species. Loss of these habitats may result in significant impacts to biological resources, depending on the species present and levels of use.
- Further study may be necessary to evaluate the importance of wildlife habitat areas and to determine the presence or absence of special-status species.
- Stanislaus County has been determined to be in nonattainment of federal and state carbon monoxide standards. It is slightly over federal standards for ozone.
- Two major point sources of pollution are located near Patterson. A tire-burning facility is located in Westley, about five miles north of Patterson, and a municipal waste-to-energy facility is under construction west of Crows Landing, about six miles southwest of Patterson.

BIBLIOGRAPHY

Air Quality Task Force, *Stanislaus Air Quality Plan*, 1982.

California Air Resources Board, *California Air Quality Data, Volume XVII-1985 Annual Summary*, 1987.

California Air Resources Board, *California Air Quality Data, Volume XVI-1984, Annual Summary*, 1985.

California Air Resources Board, *California Air Quality Data, Volume XVII-1985 Annual Summary*, 1986.

California Department of Fish and Game, *1987 Annual Report on the Status of California's State-Listed Threatened and Endangered Plants and Animals*, 1988.

California Department of Fish and Game, *At the Crossroads: Report on the Status of California's Endangered and Rare Fish and Wildlife*, 1980, Amended 1983.

California Department of Fish and Game, *Bird Species of Special Concern in California: An Annotulnurable Bird Species* (Wildlife Management Branch Administration Report 78-1) by J. Remsen, Jr., 1978.

California Department of Fish and Game, *California Natural Diversity Data Base*, (Unpublished database report), 1987.

California Department of Fish and Game, *Mammalian Species of Special Concern in California* (Wildlife Management Division Administrative Report 86-1), 1986.

California Department of Fish and Game, *San Joaquin Kit Fox Distribution and Abundance in 1975* (Wildlife Management Branch Administration Report 75-3) by S. Morrell, 1975.

California Department of Fish and Game, *Status of the Giant Garter Snake*, (Inland Fisheries Endangered Species Program, Special Publication 80-5.), by: G.E. Hanson and J.M. Brode, 1980.

California Department of Fish and Game, *The Status of Swainson's Hawk in California* (Nongame Wildlife Investigations Project W-54-R-12, Job 11-8.0.), 1980.

California Department of Fish and Game, *Toxic Substances Monitoring Program 1985 Data Report*, Prepared for State Water Resources Control Board, 1986.

California Native Plant Society, *The Geographic and Edaphic Distribution of Vernal Pools in the Great Central Valley, California*, (Special Publication No. 4.) by R.F. Holland, 1978.

Importance of Riparian Systems to Nesting Swainson's Hawks in the Central Valley of California. by R.W. Schlorff and P.H. Bloom, University of California Press, Berkeley, CA., 1984.

Patterson-Westley Chamber of Commerce, *Community Economic Profile for Patterson*, 1988.

Review of the Status of the Yellow-billed Cuckoo in California: Sacramento Valley Populations by David Gaines, 1974.

Stanislaus Area Association of Governments, *Environmental Resources Management Element - Wildlife and Vegetation*, 1974

Stanislaus Area Association of Governments, *Environmental Resources Management Element - Soils*, 1974.

Stanislaus Area Association of Governments and the Stanislaus County Air Pollution Control District, *Reasonable Further Progress Annual Report for the Calendar Year 1986*, 1987.

Stanislaus County Department of Agriculture, *Stanislaus County Agricultural Crop Report*. 1987.

Stanislaus County, *Stanislaus County General Plan Support Documents*, 1987.

University of California, Davis, and County of Stanislaus, *Soils of Westside Stanislaus Area, California* by J.C. McLaughlin and G.L. Huntington, 1968.

U.S Geological Survey, *Data for Selected Pesticides and Volatile Organic Compounds for Wells in the Western San Joaquin Valley, California, February to July 1985* (Open-File Report 87-48.) by J.M Neill, 1987.

U.S. Army Corps of Engineers. *Lower San Joaquin River, California: Aerial Atlas*. 1976.

U.S. Geological Survey, *Water Resources Data for California Water Year 1985, Volume 3* 1987.

U.S. Geological Survey, Water Resources Division, *Geology, Hydrology, and Water Quality of the Tracy-Los Palos area, San Joaquin, California*, (Open-File Report: 72-169), by: W.R. Hotchkiss and G.O. Balding, 1971.

PERSONS CONSULTED

Brode, John, Nongame Wildlife Biologist, California Department of Fish and Game

Bruch, Harter, Acting Planning Director, City of Patterson

Carson, Eugene, General Manager, West Stanislaus Irrigation District

Fourt, Bob, Geologist, Stanislaus County Department of Environmental Resources

Glenn, Eldon, Manager, U.S. Soil Conservation Service

Harrison, Bill, Manager, Del Puerto Water District

King, Holman, Unit Wildlife Biologist, California Department of Fish and Game

Lopez, Ignacio, Public Works Director, City of Patterson

Perry, Joe, Patterson Water District

Reeves, Gary, Stanislaus County Air Pollution Control District

GLOSSARY

Air Pollutant Emission - Discharges into the atmosphere, usually specified in terms of weight per unit of time for a given pollutant from a given source.

Air Pollution Control District (APCD) - A single or multi-county agency with legislative authority to adopt and enforce all rules and regulations necessary to control nonvehicular sources of air pollutants in the area.

Air Quality Standard - A health-based standard for air pollution established by the federal government and the state.

Ambient Air Quality - The quality of the air at a particular time and place.

ARB - California Air Resources Board

cfs - Cubic feet per second

CO - Carbon monoxide

DFG - California Department of Fish and Game

Habitat - The natural environment of a plant or animal

HC - Hydrocarbons

Land Capability Classification - The U.S. Soil Conservation Service's grouping of soils into classes (I through VIII), subclasses, and units according to their suitability for agricultural use, based on soil characteristics and climatic conditions

NBBD - California Natural Diversity Database, published by the California Department of Fish and Game

NO_x - Nitrogen oxides

PM₁₀ - Particulate matter less than 10 microns in diameter

Riparian Habitat - The land and plants bordering a watercourse or lake

SCS - U.S. Soil Conservation Service

USFWS - U.S. Fish and Wildlife Service

VELB - Valley elderberry longhorn beetle, a federally-listed threatened species

HEALTH AND SAFETY

INTRODUCTION

A significant health and safety issue is the need to ensure that the public is aware of the risks of asbestos. Asbestos is a naturally occurring mineral which is found in many forms. It is a known carcinogen and is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite. Asbestos is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite. Asbestos is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite.

The major health and safety issue is the need to ensure that the public is aware of the risks of asbestos. Asbestos is a naturally occurring mineral which is found in many forms. It is a known carcinogen and is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite.

HEALTH AND SAFETY ISSUES

The major health and safety issue is the need to ensure that the public is aware of the risks of asbestos. Asbestos is a naturally occurring mineral which is found in many forms. It is a known carcinogen and is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite. Asbestos is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite.

CONCLUSIONS

Asbestos is a naturally occurring mineral which is found in many forms. It is a known carcinogen and is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite. Asbestos is found in many forms of asbestos, including chrysotile, amphibole, and anthophyllite.

To ensure that the public is aware of the risks of asbestos, the Health and Safety Commission has issued a number of guidelines. These guidelines are intended to ensure that the public is aware of the risks of asbestos and to ensure that the public is aware of the risks of asbestos.

CHAPTER IX

HEALTH AND SAFETY

CHAPTER IX

HEALTH AND SAFETY

INTRODUCTION

A wide range of environmental hazards must be taken into account in the process of planning for urban development. Some of these hazards are natural, such as seismic shaking; some are purely man-made, such as noise; and others are natural hazards exacerbated by man, such as development in areas sensitive to erosion or liquefaction. Many of the hazards can simply be avoided in the development process through locational decisions, while other hazards can be tolerated or minimized by including mitigation measures in the planning and land use regulation process.

This chapter inventories and assesses the major hazards confronting Patterson, including seismic and geologic hazards, wildland and urban fires, flooding, and noise.

SEISMIC AND GEOLOGIC HAZARDS

The information in this section provides a preliminary indication of the degree of potential hazard or risk that may exist within various geologic or seismic zones. There are limits on the use of this information. The maps and text should be used as general guides to identifying the possible presence of geologic-related constraints; they should not be used as the sole basis for project approval or denial.

Seismic Hazards

Although there are several faults in and near Stanislaus County, the area has not experienced a major seismic activity. Activity in major faults outside Stanislaus County, however, suggests that the Patterson area could be affected by future activity in those regions.

To measure the characteristics of an earthquake, the Richter Scale is used to measure the magnitude (or strength) of a quake, while the Mercalli Scale is used to measure the intensity. Table IX-1 describes the effects of the 12 levels of the Mercalli Scale. Table IX-2 compares the Richter and Mercalli scales.

TABLE IX-1

MODIFIED MERCALLI SCALE OF EARTHQUAKE INTENSITY

<u>Scale</u>	<u>Effects</u>	<u>Scale</u>	<u>Effects</u>
I.	Earthquake shaking not felt.	VIII.	Difficult to stand. Shaking noticed by auto drivers. waves on ponds. Small slides and cave-ins along sand or gravel banks. Stucco and some masonry walls fall. Chimneys, factory stacks, towers, elevated tanks twist or fall.
II.	Shaking felt by those at rest		
III.	Felt by most people indoors; some can estimate duration of shaking.		
IV.	Felt by most people indoors. Hanging objects swing, windows and doors rattle, wooden walls and frames creak.	IX.	General fright. People thrown to the ground. Steering of autos affected. Branches broken from trees. General damage to foundations and frame structures. Reservoirs seriously damaged. Underground pipes broken.
V.	Felt by everyone indoors; many estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle, and glasses clink. Doors close, open, or swing.	X.	General panic. Conspicuous cracks in ground. Most masonry and frame structures destroyed along with their foundations. Some well-built wooden structures and bridges are destroyed. Serious damage to dams, dikes, and embankments. Railroads bent slightly.
VI.	Felt by everyone indoors and most people outdoors. Many now estimate not only the duration of the shaking, but also its direction and have no doubt as to its cause. Sleepers awaken. Liquids disturbed, some spilled. Small unstable objects displaced. Weak plaster and weak materials crack.	XI.	General panic. Large landslides. Water thrown out of banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flatland. General destruction of buildings. Underground pipelines completely out of service. Railroads bent greatly.
VII.	Many are frightened and run outdoors. People walk unsteadily. Pictures thrown off walls, books off shelves. Dishes or glasses broken. Weak chimneys break at roofline. Plaster, loose bricks, unbraced parapets fall. Concrete irrigation ditches damaged.	XII.	General panic. Damage nearly total, the ultimate catastrophe. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air.

Source: California Division of Mines and Geology, 1973

TABLE IX-2

APPROXIMATE RELATIONSHIPS BETWEEN
EARTHQUAKE MAGNITUDE AND INTENSITY

<u>Richter Scale Magnitude</u>	<u>Maximum Expected Intensity (MM)*</u>	<u>Distance Felt (kilometers)</u>
2.0 - 2.9	I - II	0
3.0 - 3.9	II - III	15
4.0 - 4.9	IV - V	80
5.0 - 5.9	VI - VII	150
6.0 - 6.9	VII - VIII	220
7.0 - 7.9	IX - X	400
8.0 - 8.9	XI - XII	600

*Modified Mercalli Intensity Scale

Source: United States Geologic Survey, *Earthquake Intensity Zonation and Quaternary Deposits, Miscellaneous Field Studies Map 9093*, 1977.

Faults

Faults are indications of past seismic activity. It is assumed that those that have been active recently are the most likely to be active in the future, although even inactive faults may not be "dead." The recency of seismic activity is measured in geologic terms. Geologically recent is within the past two million years (the Quaternary period). All faults believed to have been active during Quaternary time are considered "potentially active." Those that have exhibited activity within the last 11,000 years are considered "active."

Figure IX-1 illustrates the general location faults in the vicinity of Patterson. Seismic activity on these faults has the greatest potential for causing damage in the Planning Area. Seismic activity in other parts of the state can also affect the Planning Area, but the potential impacts are not as great.

San Andreas Fault Zone

The San Andreas Fault is one of the longest, most thoroughly studied, and most active faults in the world. Some sections in the Central Coast Ranges are creeping at rates as great as 3.5 centimeters per year. Other segments, north and south of the creep areas, exhibit no detectable movement. The fault in those areas appears to be temporarily "locked." It is generally agreed that a "locked" condition allows stresses to accumulate more rapidly, thus shortening the time between major earthquakes.

There is presently movement along some of the fault's length, and numerous smaller earthquakes are recorded from the fault zone. It is generally accepted that moderate to great earthquakes will take place along the San Andreas Fault in the foreseeable future. An earthquake along this fault could cause serious damage in Stanislaus County.

Hayward Fault

The Hayward Fault is located east of San Francisco Bay and extends southeast to where it probably merges with the Calaveras Fault north of Hollister. A review of the recent history of this fault shows two major earthquakes (1836 and 1868), each with an estimated Richter Scale magnitude of 6.5 to 7.5. Current measurements indicate creeping at rates up to one centimeter per year in places. Numerous small earthquakes (Richter Scale magnitude of 3 to 5) have occurred along this fault in recent years.

Calaveras Fault

The Calaveras Fault borders the eastern flank of the Berkeley-Hayward Hills, and extends to the southeast. Epicenters of recent earthquakes of Richter Magnitude of 4.5 have been located along or near this fault. In 1868, an earthquake of unknown magnitude caused ground breakage near Danville. Several centimeters of creep have been measured in Hollister, where a Calaveras Fault trace cuts through a residential area.

Green Valley - Concord Faults

This fault zone, extending from Walnut Creek to west of Fairfield, has experienced displacement along most of its length within recent geologic time. An earthquake of 5.4 magnitude occurred in 1955 along part of this fault near Concord. There is currently evidence of some movement along the fault near Concord. The greatest probable earthquake generated by this fault is not expected to exceed a magnitude of 7.0 on the Richter Scale.

Midland Fault

The Midland Fault, buried under recent alluvium, extends north from Bethel Island in the Delta to east of Lake Berryessa. Its activity is not as well documented as the faults discussed previously. There is evidence, however, that fault displacement has occurred during recent geologic time. The State Division of Mines and Geology believes that the Midland Fault is a possible source of a major earthquake centered in Vacaville in 1892. The maximum probable earthquake on this fault is estimated to be 7.0 on the Richter Scale.

Patterson Pass Fault

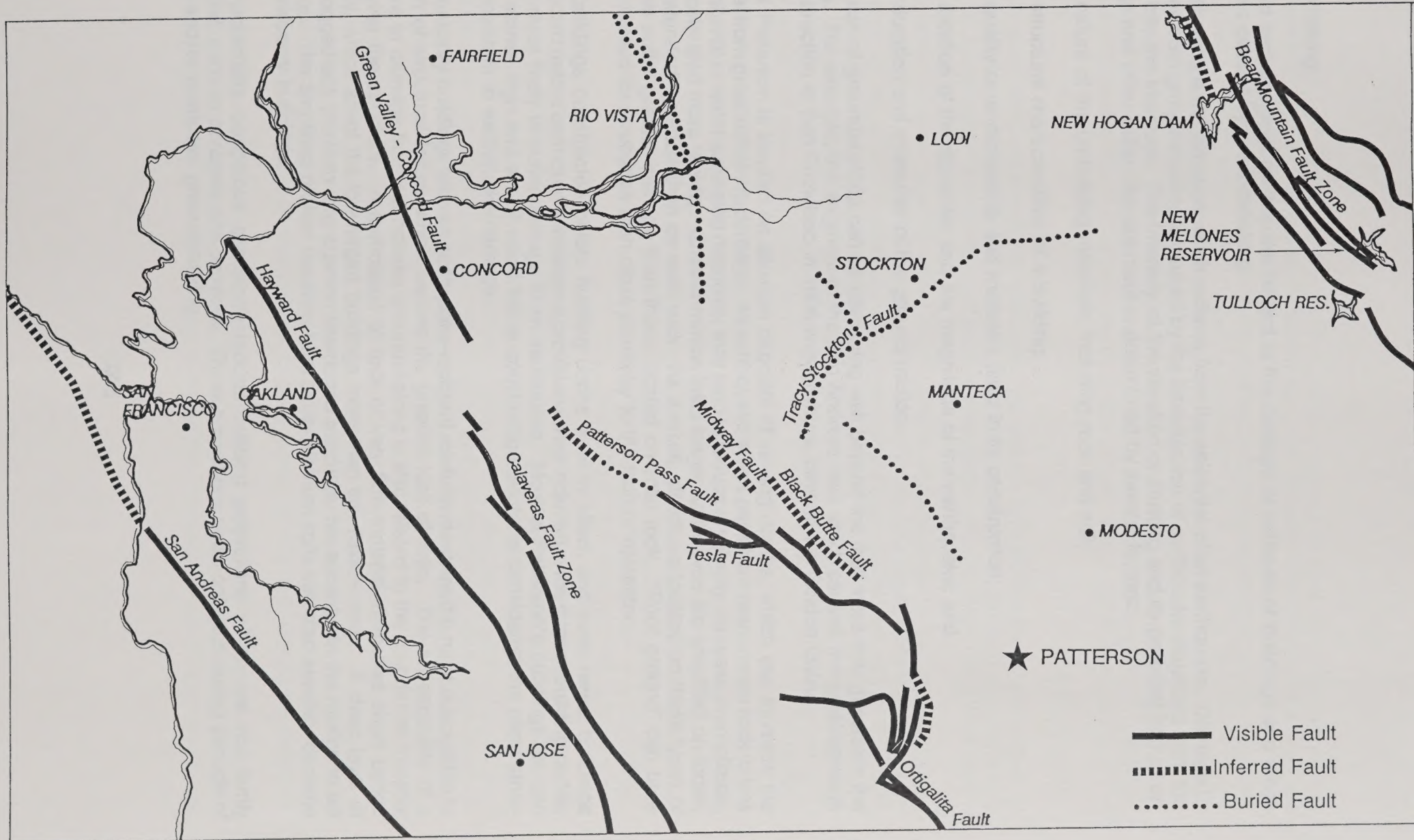
The Patterson Pass Fault runs northwest from the Alameda/San Joaquin County boundary toward Livermore. Its location is imprecise and the nature of movement, if any, is uncertain. The fault is cited because of one well-located epicenter generating a 4.5 magnitude earthquake in 1946.

Tesla - Ortigalita Faults

Within the Diablo Mountain Range, the most recent movements along this fault were approximately five million years ago, although earthquake activity without surface fracturing or faulting is still common. An Alquist-Priolo Special Studies Zone is located along the Ortigalita Fault in the Diablo Range and extends into Stanislaus County about seven miles at its southwest edge.

Figure IX-1

FAULTS IN THE VICINITY OF PATTERSON



Source: California Division of Mines and Geology, *Fault Map of California*, 1975.

Groundshaking

The most serious direct earthquake hazard is the damage or collapse of buildings and other structures caused by groundshaking.

Groundshaking is the vibration which radiates from the epicenter of an earthquake. Damage to structures from groundshaking is caused by the transmission of earthquake vibrations from the ground into the structure. The intensity of the vibration or shaking and its potential impact on buildings and other urban development is determined by several factors:

- The nature of the underlying materials, including rock and soil;
- The structural characteristics of a building;
- The quality of workmanship and materials used in its construction;
- The location of the epicenter and the magnitude of the earthquake; and
- The duration and character of the ground motion.

The effects of groundshaking can be damaging well beyond the fault trace that generates the shaking. For example, the segment of the San Andreas fault which caused the great damage and destruction in San Francisco in 1906 was offshore, beyond the Golden Gate.

Most of Patterson is located on alluvium deposits of varying depths, which can increase the potential from groundshaking damage. As earthquake waves pass from more dense rock to less dense alluvial or water-saturated materials, they tend to reduce in velocity, increase in amplitude, and accelerated more rapidly. Ground motion lasts longer and waves are amplified on loose, water-saturated materials than on solid rock. As a result, structures located on these types of materials suffer greater damage than those located on solid rock. "Poor ground" can be a greater hazard for structures than close proximity to the fault or epicenter.

Older buildings constructed before building codes were in effect, and even newer buildings constructed before earthquake resistance provisions were included in the current building codes, are the most likely to suffer damage in an earthquake. Most of Patterson's buildings are one or two stories high and are of wood frame construction, which is considered the most structurally resistant to earthquake damage.

Older masonry buildings without earthquake-resistant reinforcement are the most susceptible to the sort of structural failure which causes the greatest loss of lives. The susceptibility of a structure to damage from earthquake groundshaking is also related to the foundation material underlying the structure. A foundation of rock or very firm material intensifies short period motions, which affect the low-ridged buildings more than tall, flexible ones. A deep layer of water-logged soft alluvium may cushion low-ridged buildings, but accentuate the motion in tall buildings. The amplified motion resulting from softer alluvium soils can also severely damage older masonry buildings.

Other potentially dangerous conditions include building projections which are not firmly anchored, such as parapets and cornices. These projections could collapse during periods of strong and/or sustained groundshaking.

Fire is often the major form of damage resulting from groundshaking effects. Ninety percent of the destruction in the 1906 San Francisco earthquake was caused by fire. This devastation resulted largely from the great number of buildings constructed of combustible materials, damage to much of the city's firefighting facilities, and the rupture of water mains.

Most earthquake-induced fires start because of ruptured power lines, damage to wood, gas, or electrical stoves, and damage to other gas or electrical equipment. This points out the need for greater emphasis on non-combustible material and on special construction techniques so that water mains will remain unbroken during large earthquakes. Critical facilities, such as hospitals and fire stations, should be sited, designed, and constructed to withstand severe groundshaking.

Ground Failure

In addition to structural damage caused by groundshaking, there are other ground effects caused by the shaking. These are known as ground failure effects and include liquefaction, settlement, lateral spreading, lurch cracking, and earthquake induced landslides.

Liquefaction is the loss of soil strength due to seismic forces acting on water-saturated granular soils. This loss of strength leads to a "quicksand" condition which causes many types of ground failure. When the liquefied granular layer occurs at the surface, objects can either sink or float depending on their density. The evaluation of potential for liquefaction is complex and must consider soil type, soil density, groundwater table, and the duration and intensity of shaking. Liquefaction is most likely to occur in deposits of weak saturated alluvium or similar deposits of artificial fill.

Liquefaction potential within Patterson exists in low-lying areas composed of unconsolidated, saturated, clay-free sands and silts.

Patterson is theoretically subject to liquefaction resulting from earthquakes on several faults. The expected degree of earthquake-caused shaking is, however, relatively low, and it is unlikely that significant liquefaction would occur. Further study is needed to identify specific areas within the city limits that are susceptible to liquefaction.

Settlement is the compaction of soils and alluvium caused by groundshaking. It occurs irregularly and may be partly controlled by bedrock surfaces, and old lake, slough, swamp, and stream beds. The amount of compaction may range from a few inches to several feet. Irregular compaction is most widespread and extreme in major earthquakes. It may occur as much as 75 to 80 miles from the epicenter and may amount to several feet even at that distance. Compaction is most likely to occur in areas, such as Patterson, which are underlain by soft water-saturated low density alluvial material.

Lurch cracking refers to fractures, cracks, and fissures produced by groundshaking, settling, compaction of soil, and sliding and may occur many miles from the epicenter of an earthquake. These effects are characteristic of earthquakes large enough for significant ground motion to occur. The larger the earthquake magnitude, the more extensive the effects. Thus, a major earthquake may damage streets, curbs, sewer, gas, and water lines.

Lateral spreading is the horizontal movement or spreading of soil toward an open face such as a stream bank, the open side of fill embankments, or the sides of levees. Artificial fill areas which are improperly engineered or which have steep, unstable banks are most likely to be affected.

The potential for lurch cracking and lateral spreading is highest in areas where there is a high groundwater table, relatively soft and recent alluvium deposits, and where creek banks are relatively high. Fracture patterns from lurch cracking and lateral spreading may be controlled by the configuration of shallow bedrock structures, by highway surfacing, by the margins of fill, and engineering structures.

Earthquakes can also cause landsliding and slumping. Patterson is mostly level, so landsliding and slumping should not be problems, except in the Diablo Mountains west of Interstate 5, which are prone to landsliding.

Seiches

Seiches are earthquake-generated waves within enclosed or restricted bodies of water. Major, and even moderate earthquakes, miles away from Patterson can produce oscillations or waves in local bodies of water which could overtop and damage levees and cause water to inundate surrounding areas.

The bodies of water most susceptible to seiches in or near Patterson are the San Joaquin River, California Aqueduct, and the Delta-Mendota Canal. The danger of seiches during seismic events is limited to those periods when the river and canals are full during the flood season. Overtopping of levees during this period could cause a limited amount of flooding.

Assessment of Potential Seismic Hazards

The California Division of Mines and Geology has produced a maximum expected earthquake intensity map which shows Patterson in the moderate severity zone. The moderate zone classification indicates that Patterson would experience a maximum shaking intensity of VII to VIII on the Modified Mercalli Scale, causing general alarm and moderate damage.

Landslide and Erosion Hazards

Historically, a number of major slides have occurred throughout the Diablo Range in Stanislaus County. The steep slopes and unstable geology of the area presents a limitation to building, and the hazards would be exacerbated by earthquakes. Because most of Patterson is level, landslides are not a problem except for potential slumping along the levees.

According to the U.S. Soil Conservation Service, the erosion hazard exhibited by surface soils is considered low. The essentially level topography of the Patterson area means that erosion will not present a significant problem.

Soils

The type of soils present determines the susceptibility of certain land areas to erosion and ground failure. Patterson's are generally considered to have none to slight erosion hazards, poor permeability, high to moderate shrink-swell capacities and high water retention capabilities.

All soils have certain engineering properties and characteristics such as erosion potential, shrink-swell behavior, and permeability, which determine their suitability and constraints for building sites, loads, grading, and drainage systems. The soils in Patterson have been mapped by the

Soil Conservation Service. Chapter VIII, Natural Resources, contains a map of the soils in Patterson and a description of their characteristics.

Volcanic Hazards

The products of volcanic eruptions cause damage by their heat or by covering the landscape with their deposits. A volcanic eruption can take human lives, destroy buildings, destroy or pollute water supply systems, and convert productive farmland to sterile, rocky landscapes. The most probable centers for future volcanic eruptions are distant from Patterson, along the eastern margin of the Sierra Nevada.

Land Subsidence

Subsidence of the land surface can result from extraction of groundwater, gas, oil, and geothermal energy. Hydrocompaction, peat oxidation, and fault rupture are also potential causes of subsidence. Groundwater withdrawal subsidence is the most extensive type in California. This type of subsidence has been observed only in valley areas underlain by alluvium.

Subsidence can cause a change in gradients affecting the carrying capacities of canals, drains, and sewers. Compaction of sediments at depth has caused extensive damage to water wells in areas where subsidence has been substantial. The magnitude of subsidence depends primarily on the following five factors:

- The magnitude of water level decline.
- The thickness of the alluvium tapped by wells.
- The individual and combined thicknesses and compressibilities of the silt and clay layers within vertical sections tapped by wells.
- The lengths of time during which water level declines are maintained.
- The number of occurrences of heavy withdrawals of water in any single area.

Patterson is within the San Joaquin groundwater basin. This basin has been identified by the California Department of Water Resources as experiencing overdraft. The Patterson area experienced some overdraft during the 1976-77 drought. Wells are now monitored by the U.S. Soil Conservation Service to identify potential overdraft problems.

Water Pollution

The city's potable water is supplied by wells. The local groundwater is of generally good quality, and consistently meets federal drinking water standards. The city has had to chlorinate its water on a few occasions when new water hookups led to increased salinity in the water.

Water quality in the San Joaquin River and the irrigation canals is degraded by runoff and discharges into the San Joaquin River. The river's water quality is discussed in Chapter VIII, "Natural Resources."

FLOODING HAZARDS

Flooding in Patterson could result from the 100-year flood, localized flooding, and dam and levee failure. Stanislaus County has a general history of flooding. Flooding occurred along the San Joaquin River in 1983.

The primary effects of flooding are caused by the initial force of flood waters which can shatter structures and uplift vehicles. Floodwaters can carry large objects downstream which have the force to remove stationary structures. Saturation of materials and earth can cause instability, collapse, and damage. Objects can be buried through sediment deposition. Floods can cause drowning or isolation of persons and animals. Floodwaters can break utility lines, interrupting services and potentially affecting health and safety, particularly in the case of broken sewer or gas lines.

The secondary effects of flooding area are due to standing water. Standing water can result in loss of crops, septic tank failure, and water well contamination. Standing water can also damage roads, foundations, and electrical circuits.

The 100-Year Flood Hazard

A 100-year flood has a one percent probability of occurring in any year. This is considered to be a severe flood, but one with a reasonable possibility of occurrence for purposes of land use planning, property protection, and human safety. The Federal Emergency Management Agency (FEMA) prepares maps showing areas which are likely to flood during a 100-Year flood event. FEMA revised its maps for the unincorporated Planning Area in August 1988. Portions of the Planning Area within the 100-year floodplain as defined by FEMA's preliminary map released in August 1988 are depicted in Figure IX-2.

As shown in Figure IX-2, the primary areas of the Planning Area which would flood during a 100-year event are in the northwest region due to Del Puerto Creek, north of Walnut Avenue due to flooding from Salado Creek, and the area surrounding the San Joaquin River

Salado Creek

Salado Creek originates in the Diablo Mountains south of Patterson. The creek flows through an earth channel from the west until it reaches Highway 33, where the natural creek was filled in and replaced with a 36-inch pipe. During heavy storms, Salado Creek does not have adequate capacity to carry upstream storm water runoff through the city.

During heavy storms, Salado Creek backs up and spills over its banks near the railroad culvert, causing flooding in areas east of Highway 33 and north of Walnut Avenue. The most severe flood occurred in 1958. Flooding from Salado Creek also damaged local farm land during 1983 and 1986. The City and County have committed funds for the U.S. Army Corps of Engineers to conduct a feasibility study to identify possible solutions to Salado Creek flooding.

Dam Failure Flood Hazard

The risk of dam failure is remote. Dam failure can occur under three general conditions: earthquake; structural instability; and intense rainfall in excess of a dam's holding capacity. According to the Stanislaus County General Plan, Patterson is not within the inundation areas for Don Pedro Reservoir, New Melones Dam, or Tulloch Dam.

FIRE HAZARDS

Both structural and wildland fire hazards threaten life and property within Patterson. Wildland fires resulting from both man-made and natural causes occur in forest, brush, or grasslands, primarily in sparsely developed or existing open space lands. Structures and urban development may also be threatened or destroyed in the area of wildland fires. Structural fires usually result from man-made causes and threaten many residential and commercial structures, especially those built before building and fire codes were established. These substandard structures represent the highest potential for injury, death, or loss of property.

Structural Fire Hazards

Structural fire hazards are primarily associated with residential, commercial, and industrial structures and activities. Urban fires can start for a wide variety of reasons, including electrical shorts, industrial accidents, carelessness, and arson. In general, however, fire hazards are greatest in buildings and structures which are old or substandard. Older structures in Patterson are generally in the original neighborhoods and in some other areas.

Fire hazards are also the result of inadequate water flows in some of the older areas of the city served by undersized mains. The primary areas of concern are the downtown circle and the strip along First Street. The City is planning on upgrading water mains to serve the areas outlying the circle.

Wildland Fire Hazards

The outbreak and spread of wildland fires in the Planning Area is a potential danger, particularly during the summer months. The buildup of understory brush which under natural conditions would be periodically burned off creates conditions conducive to larger and more intensive fires.

Variable conditions such as humidity, drought, rainfall, wind velocity, type and presence of vegetation, and fuel buildup are the main determinants to the start, spread, and control of wildland fires. The annual drought season (May to October) gives rise to the most hazardous fire conditions, especially in the latter months. It should be noted that most wildland fires in California are the result of either arson or simple human carelessness.

Portions of the Planning Area most susceptible to wildland fires are the dense brush along the river, and brush in the western portion of the Planning Area west of Interstate 5. The California Department of Forestry rates these as having a high critical fire hazard. Figure IX-3 indicates the general areas of structural and wildland fire hazards.

TOXIC/HAZARDOUS MATERIALS

Patterson has some industries and activities which transport, store, or use toxic or hazardous chemicals, posing potential safety hazards. The most prevalent hazardous materials in Patterson are the storage of pesticides and herbicides. The County Agricultural Office on First Street is listed as a hazardous waste facility because it is used as a temporary storage facility for hazardous waste. The waste is moved to a permanent disposal facility when sufficient quantities have accumulated to make movement effective. Figure IX-3 shows the locations of sites storing hazardous materials.

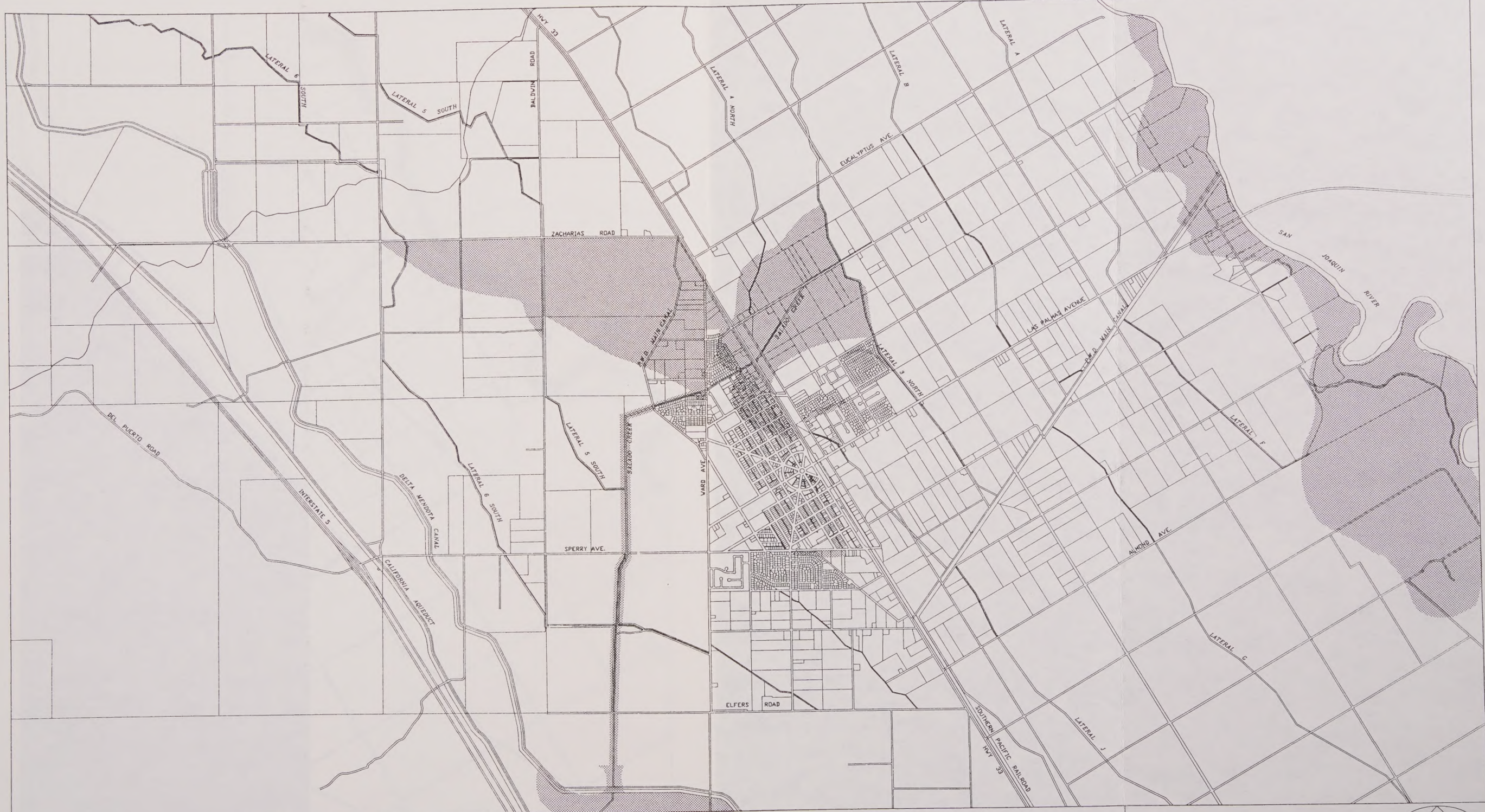
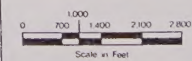
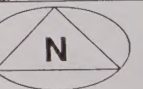


Figure IX-2
100-YEAR FLOODPLAIN (PRELIMINARY)



Base Map prepared by Lew Garcia Davis, July, 1988



Patterson Planning Area

Source: Federal Emergency Management Administration: City of Patterson, November 1981; Stanislaus County
Unincorporated Area, August 1988.

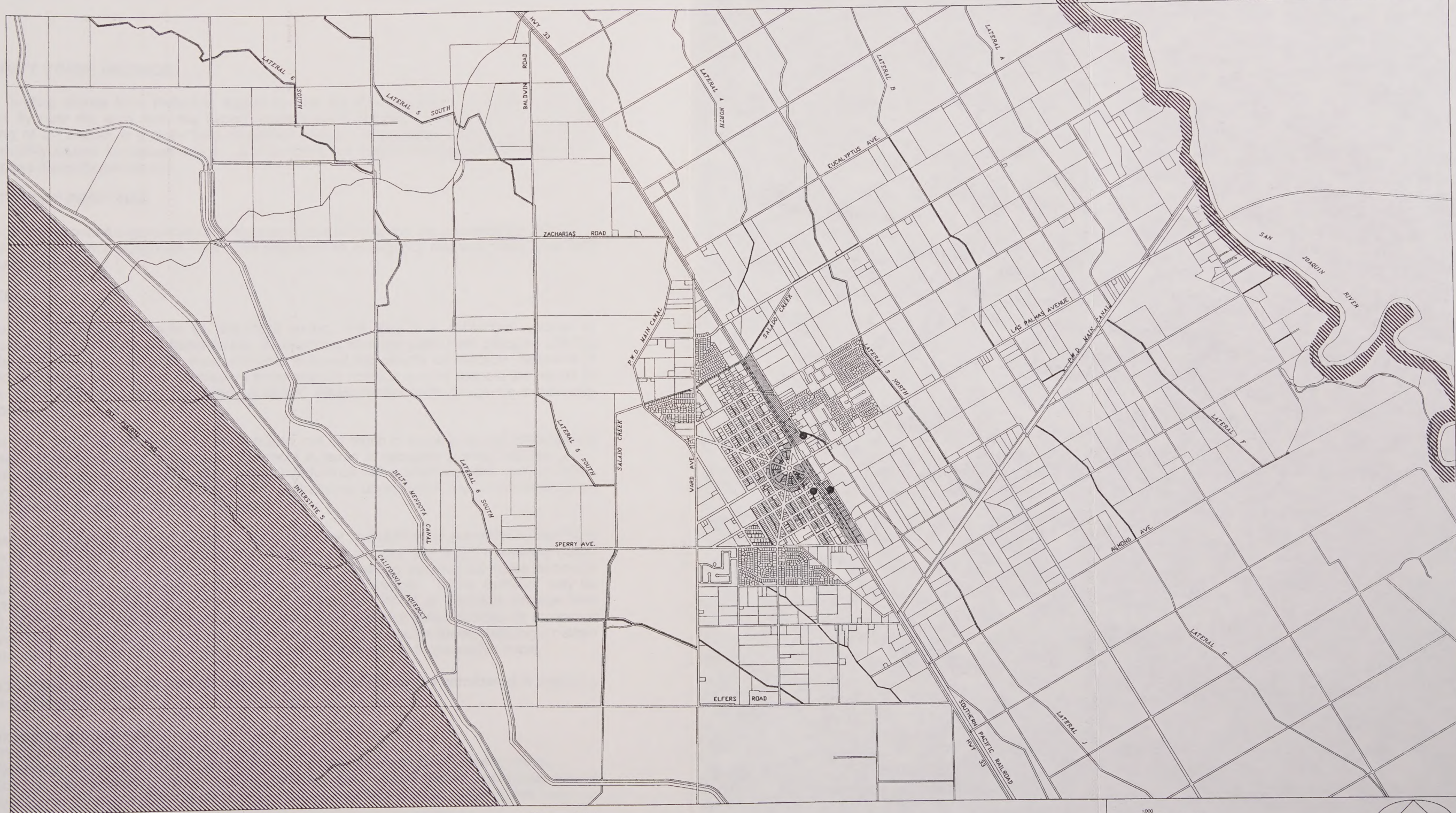
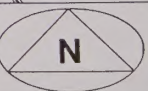


Figure IX-3
FIRE HAZARD AREAS

-  Structural Fire Hazard Areas
-  Wildland Fire Hazard Areas
-  Sites Storing Hazardous Materials

Source: City of Patterson Fire Department, 1988.



Base Map prepared by Lew Garcia Davis July 1988

Patterson Planning Area

AIRCRAFT CRASH HAZARDS

Crop dusting planes from Patterson Airport fly over the Planning Area. In addition, military planes fly over the area from the Crows Landing Naval Auxiliary Landing Field. Any crash landing of an aircraft is a potentially disastrous hazard. Any aircraft crash could create an accessibility hazard for rescue crews. Unintentional fuel dumps over populated areas would also pose a significant hazard.

EMERGENCY RESPONSE

Emergency response organization and responsibilities in Patterson are governed by Stanislaus County's Emergency Response Plan. The plan outlines emergency response procedures and evacuation routes.

NOISE

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers for many years have grappled with the problem of translating objective measurements of sound into directly correlatable measures of public reaction to noise. The descriptors of community noise in current use are the results of these efforts and represent simplified, practical, measurement tools to gauge community response.

Noise has often been cited as a health problem, not so much in terms of actual physiological damage, such as hearing impairment, but more in terms of reducing general well-being and contributing to undue stress and annoyance. Interference with human activities such as sleep, speech, recreation, and tasks demanding concentration or coordination, are the principal cause of noise-induced health problems and stress.

As part of the state-mandated noise element, state law and guidelines prepared by the State Office of Noise Control (ONC) require that certain noise sources and areas containing noise-sensitive land uses be identified and quantified by preparing generalized noise exposure contours for current and projected conditions within a community. Noise contours may be prepared in terms of the community noise equivalent level (CNEL) or day-night average level (Ldn), both of which are descriptors of total noise exposure at a given location for an annual average day. This noise exposure information may be used as a guide for establishing a pattern of land uses that minimizes the exposure of community residents to excessive noise.

The ONC guidelines require that the following major noise sources be considered in preparing a noise element:

- Highways and freeways.
- Primary arterials and major local streets.
- Passenger and freight on-line railroad operations and ground rapid transit systems.
- Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
- Local industrial plants, including, but not limited to, railroad classification yards.
- Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

Based on discussions with City of Patterson staff regarding potential major noise sources, it was determined that there are several potentially significant primary sources of community noise within Patterson. These sources include traffic on major roadways and highways, railroad operations, and industrial activities.

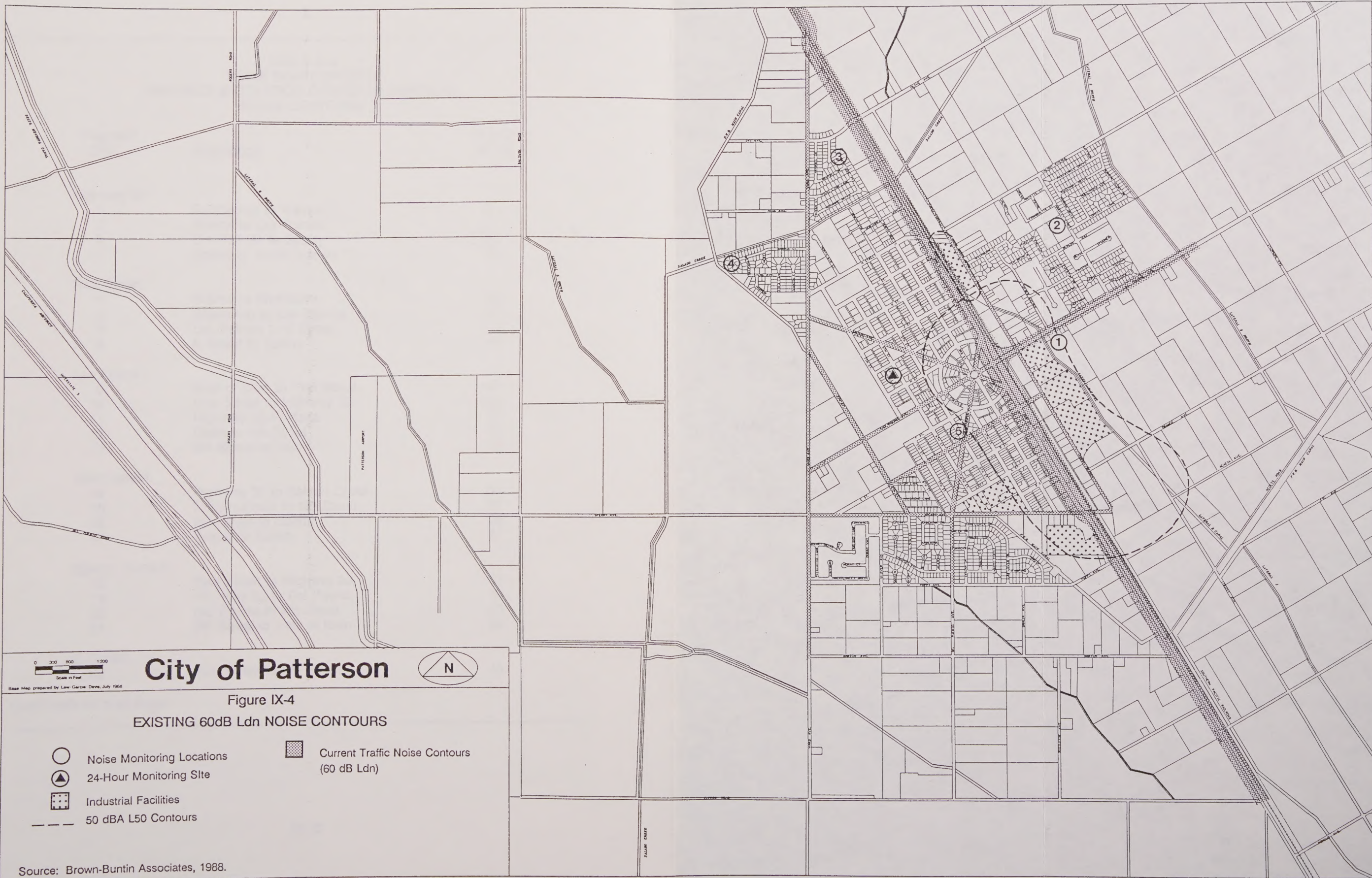
Analytical noise modeling techniques and noise measurements were used to develop generalized Ldn noise contours for the major roadways, railroads and industrial noise sources in the City of Patterson for existing (1988) conditions.

Roadways

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to develop Ldn contours for Highway 33 and major roadways in Patterson. The FHWA Model is the analytical method presently favored for traffic noise prediction by most state and local agencies, including Caltrans. The FHWA Model is based upon reference energy emission levels for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site.

The FHWA Model was developed to predict hourly Leq values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict Ldn values it is necessary to determine the hourly distribution of traffic for a typical 24-hour day and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

Traffic data representing annual average traffic volumes were obtained from Caltrans and the City of Patterson. The day/night distribution of traffic and the truck mix was based upon Caltrans file data and estimates by Brown-Buntin Associates, noise consultants for the General Plan. Using the traffic data and the FHWA methodology, traffic noise levels as defined by Ldn were calculated for existing traffic volumes. Distances from the center of the roadway to Ldn contour values of 60 and 65 dB are summarized in Table IX-3 and illustrated in Figure IX-4.



City of Patterson

Figure IX-4
EXISTING 60dB Ldn NOISE CONTOURS

- Noise Monitoring Locations
- ▲ 24-Hour Monitoring Site
- Industrial Facilities
- 50 dBA L50 Contours
- Current Traffic Noise Contours (60 dB Ldn)

Source: Brown-Buntin Associates, 1988.

TABLE IX-3
NOISE CONTOUR DATA
DISTANCE (FEET) FROM CENTER OF ROADWAY
TO Ldn CONTOURS

<u>Segment Nos.</u>	<u>Description</u>	<u>Current 60 dB</u>
Highway 33:		
1	Eucalyptus to Walnut	121
2	Walnut to Las Palmas	127
3	Las Palmas to Sperry	163
4	Sperry to south of town	126
First Street:		
5	Walnut to Washburn	45
6	Washburn to Las Palmas	65
7	Las Palmas to E Street	39
8	E Street to Sperry	43
Las Palmas:		
9	East of town to First Street	101
10	First Street to Highway 33	130
11	Highway 33 to Plaza	72
12	Plaza to 9th Street	45
13	9th Street to Ward	9
Ward Street:		
14	Highway 33 to Salado Creek	37
15	Salado Creek to 9th Street	61
16	9th Street to Sperry	28
17	Sperry to Baltch	49
Sperry Avenue:		
18	First Street to Highway 33	34
19	Highway 33 to Del Puerto	46
20	Del Puerto to 9th Street	43
21	9th Street to west of town	64
E Street:		
22	First Street to 9th Street	45

Continued on next page

TABLE IX-3 (Continued)
NOISE CONTOUR DATA
DISTANCE (FEET) FROM CENTER OF ROADWAY
TO Ldn CONTOURS

<u>Segment Nos.</u>	<u>Description</u>	<u>Current 60 dB</u>
Del Puerto:		
23	Plaza to Sperry	49
24	Sperry to Poppy	40
Salado Avenue:		
25	Plaza to 7th Street	60
26	7th Street to Ward	49
9th Street:		
27	Ward to Sperry	44

Source: Brown-Buntin Associates, July 1988.

It should be noted that since calculations did not take into consideration shielding caused by local buildings or topographical features, the distances reported in Table IX-3 should be considered as worst-case estimates of noise exposure along roadways in the community.

Railroads

Railroad operations in Patterson include Southern Pacific Transportation Company freight activity on the north-south Highway 33 line. Railroad operations data obtained from Southern Pacific indicate the traffic volume on the branch line in Patterson is approximately one to two trains per day on an unscheduled basis randomly distributed through the daytime hours. Train speeds in Patterson are generally 25 to 35 miles per hour.

Due to relatively infrequent operations on the branchline, noise exposure exceeding 60 dB Ldn is confined to the railroad right-of-way, although the use of the horn at grade crossings would be expected to result in significant short-term impacts for persons located near the tracks.

Industrial Facilities

The production of noise is an inherent part of many industrial processes, even when the best available noise control technology is applied. Noise production within an industrial facility is controlled indirectly by Federal and State employee health and safety regulations (OSHA and CalOSHA), but exterior noise emissions from industrial operations have the potential to exceed locally acceptable standards at noise sensitive land uses.

Industrial noise control issues focus upon two objectives: to prevent the introduction of new noise-producing uses in a noise sensitive area, and to prevent encroachment of noise sensitive uses upon existing industrial facilities. The first objective can be achieved by applying

performance standards to proposed new industrial uses. The second objective can be met by requiring that new noise sensitive uses in proximity to existing industrial facilities include mitigation measures to ensure compliance with the same performance standards.

The following descriptions of existing industrial noise sources in Patterson are intended to be representative of the relative noise impacts of such uses, and to identify specific noise sources which should be considered in the review of development proposals in their environs. The locations of these noise sources are shown by Figure IX-5.

Patterson Frozen Foods, Inc.
100 W. Las Palmas Avenue

Operations at Patterson Frozen Foods consist of packaging and freezing of vegetables. Significant noise sources at the frozen foods plant include compressors, pumps, fans, packaging equipment and cooling towers. Heavy trucks and forklifts are also used extensively at Patterson Frozen Foods. The plant is reported to operate 24 hours per day/12 months per year with a decrease in operations in January for equipment overhauls and maintenance. Fan and cooling tower operations were observed to be the most prevalent noise sources in the community near the plant. Nighttime noise measurements of Patterson Frozen Foods operations were conducted at five locations surrounding the plant on March 29, 1988. The results of these measurements are presented in Table IX-4 and the location of the 50 dBA L50 contour for Patterson Frozen Foods operations is shown in Figure IX-5.

TABLE IX-4
MEASURED NIGHTTIME NOISE LEVELS
Patterson Frozen Foods
March 29, 1988

<u>Location</u>	<u>Leq, dBA</u>
1st & Las Palmas Avenue	60.5
1st & Orange Avenue	54.5
Locust Avenue & Orange Avenue	53.5
Sperry at Railroad Tracks	52.0
Las Palmas Avenue between 2nd & 3rd	58.0

Designed Mobile Systems Industries
800 South Highway 33

Designed Mobile Systems Industries (DMSI) manufactures commercial modular buildings. Typical hours of operation are 7:00 a.m. to 3:30 p.m. with occasional increases in operations to meet demand. Potentially significant noise sources associated with plant operation include welding, grinding, pneumatic nail guns and some fork lift and truck activity. Operations are generally contained within a manufacturing shed and no appreciable noise events were observed by Brown-Buntin Associates during a site visit. Future expansion has been planned for DMSI

which could result in increased noise levels in the project vicinity. An acoustical analysis may be warranted for new noise sensitive development adjacent to DMSI.

Pacific Tomato Growers
525 Sperry Avenue

Operations at the Pacific Tomato Growers plant consist of the packaging and distribution of tomatoes and tomato products. Operations at this plant are seasonal from August through November. The plant typically operates from 6 a.m. to 8 p.m. during this season. Potentially significant noise sources at this plant include conveyors, dryers, compressors, packaging equipment and heavy truck operations. It is reported that approximately 40 truck operations occur between 6 a.m. to 12 noon. Noise measurements of the tomato plant were not performed due to production being completed prior to the noise survey. An acoustical analysis of the Pacific Growers Plant in full operation should be required prior to the development of noise sensitive uses near the facility to ensure compliance with the noise element performance standards.

Hancor Inc.
401 First Street

Hancor Inc. operates a plastic drainage pipe manufacturing plant. The facility operates 6 days per week on a 24-hour basis. Noise producing activities at the plant include a vacuum system for unloading rail cars, mixing tools, a shredder and random heavy truck and forklift activities. Mixing and shredding operations are performed inside a steel warehouse. Average noise levels of 55-56 dBA were measured at the nearest residence during daytime hours. A level of 51 dBA was measured at the same location during nighttime hours. Figure IX-5 shows the approximate location of the 50 dBA L50 contour for typical plant operations.

Community Noise Survey

A community noise survey was conducted to document noise exposure in areas of the community containing noise sensitive land uses. The following noise sensitive land uses were identified within the City of Patterson:

- All residential uses
- Schools
- Del Puerto Hospital

Noise monitoring sites were selected as representative of typical conditions in areas of the community where such uses are located. Short-term noise monitoring was conducted during three periods of the day and night on March 29, 1988, so that reasonable estimates of Ldn could be prepared. One long-term noise monitoring site was established to record day-night statistical trends during the same period.

The locations, measured noise levels, and estimated Ldn values for each of the seven noise monitoring sites are summarized in Table IX-5. The monitoring sites are depicted on a map of the city in Figure IX-5. Figure IX-6 describes the compatibility of general categories of land uses for community noise exposure.

The community noise survey results indicate that typical noise levels in noise sensitive areas of Patterson are in the range of 50 dB to 60 dB Ldn. Noise from traffic on roadways and industrial

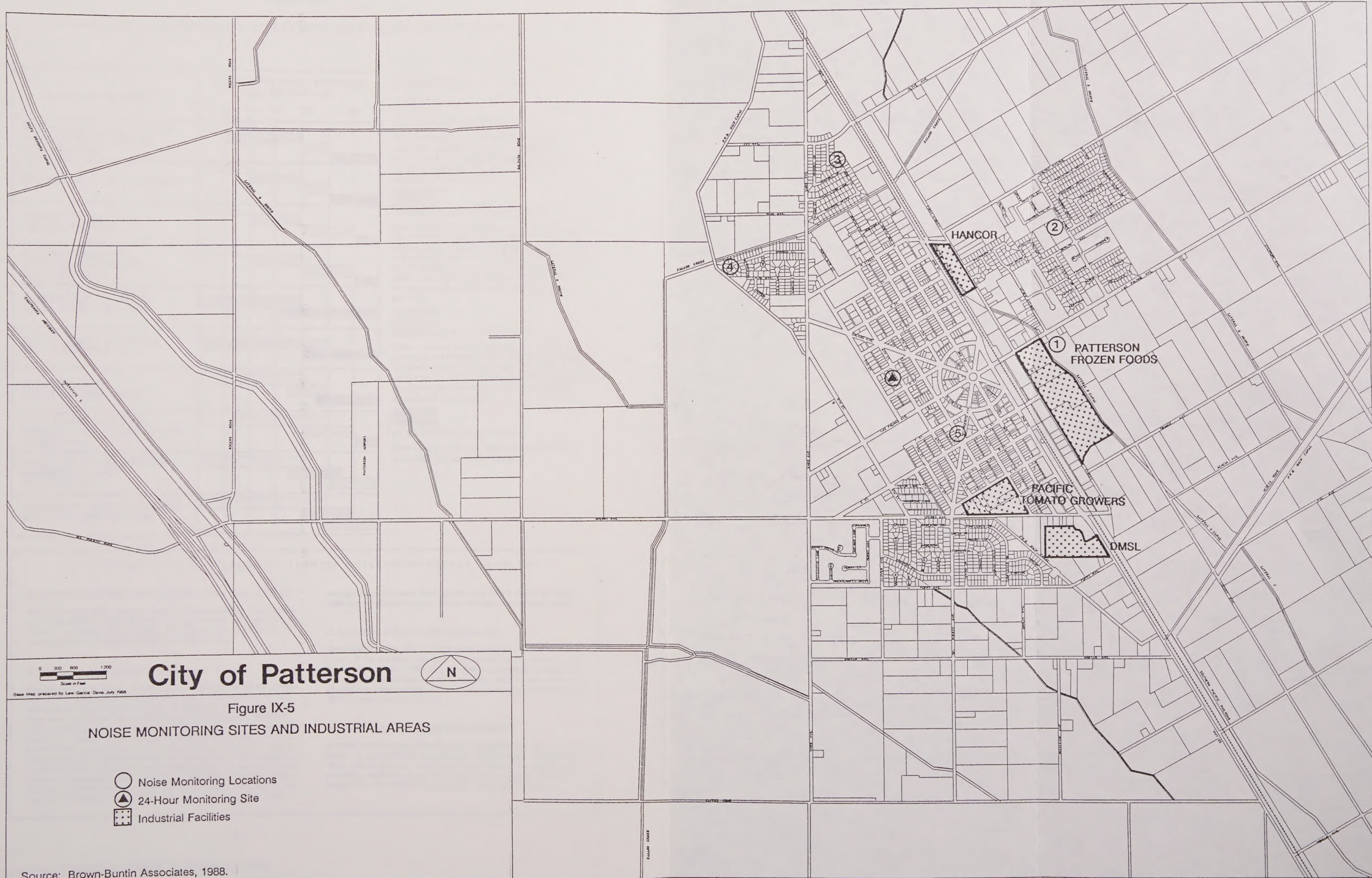
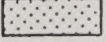
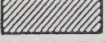


Figure IX-6

LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L _{dn} OR CNEL, dB						INTERPRETATION
	55	60	65	70	75	80	
RESIDENTIAL – LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES							 NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
RESIDENTIAL – MULTI. FAMILY							
TRANSIENT LODGING – MOTELS, HOTELS							 CONDITIONALLY ACCEPTABLE New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES							
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES							 NORMALLY UNACCEPTABLE New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS							
PLAYGROUNDS, NEIGHBORHOOD PARKS							 CLEARLY UNACCEPTABLE New construction or development should generally not be undertaken.
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES							
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL							
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE							

CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE

A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn}. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L_{dn}.

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located in Com-

munity Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

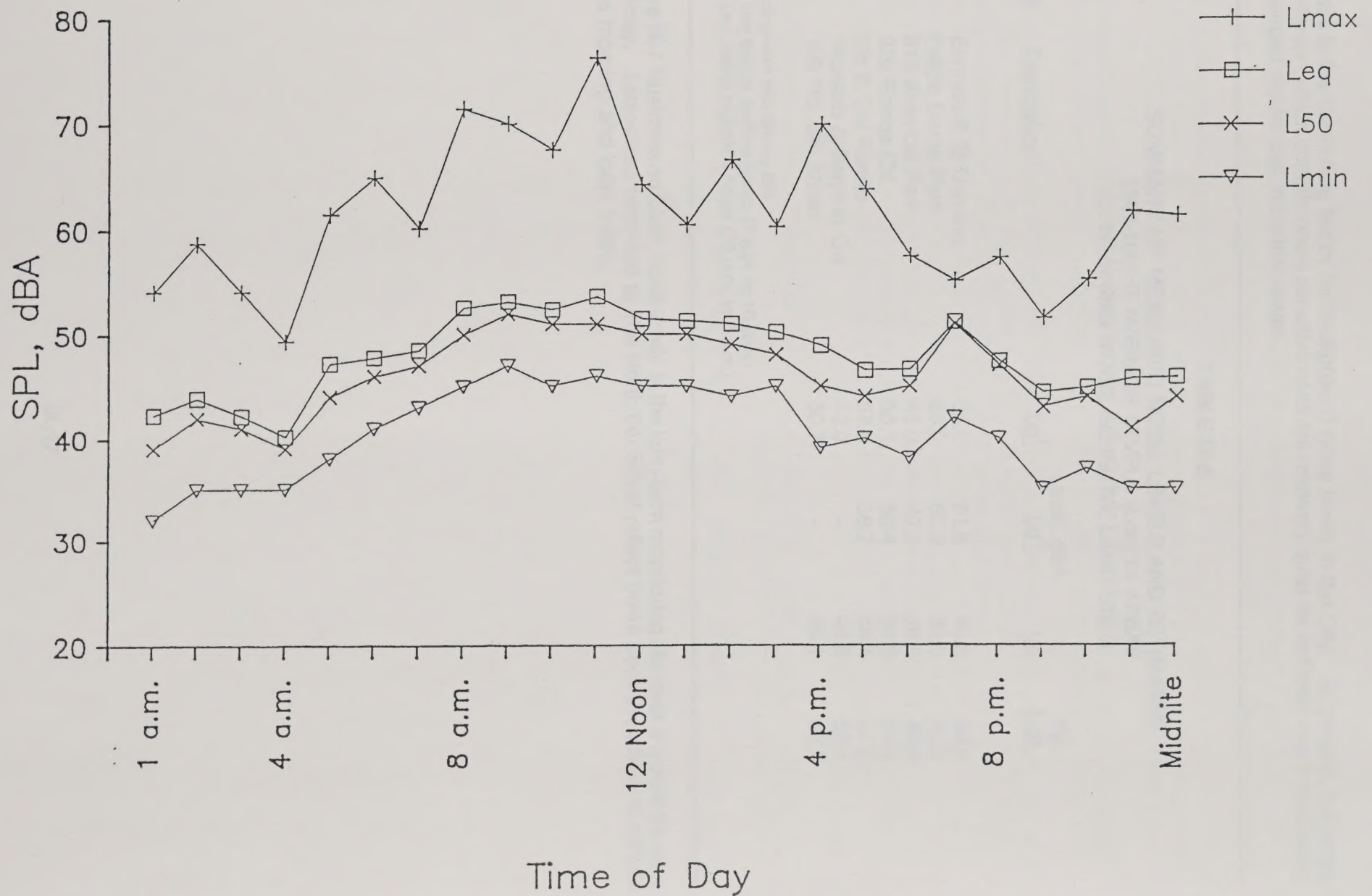
C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn}. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Fi IX-7
AMBIENT NOISE LEVELS
108 North Sixth Street
March 29-30, 1988



Source: Brown-Buntin Associates, 1988.

sources is the controlling factor for background noise levels in the City. In general, the areas of Patterson which contain noise sensitive uses are relatively quiet except near major roadways, the railroad tracks and industrial areas.

TABLE IX-5

SUMMARY OF MEASURED NOISE LEVELS AND ESTIMATED
DAY-NIGHT AVERAGE LEVELS (Ldn) IN AREAS
CONTAINING NOISE SENSITIVE LAND USES

<u>Site#</u>	<u>Description</u>	Level, dBA		<u>Ln</u>	Est. <u>Ldn</u>
		<u>Ld</u> ¹	<u>Ld</u> ²		
1	Enrique & El Camino	56.2	51.5	48.8	56.6
2	Felipe Garza Park	65.0	52.2	39.1	60.3
3	310 Arambel Park	48.0	49.3	38.9	48.8
4	320 Barros Crt.	55.1	50.4	39.5	52.3
5	5th & Del Puerto	57.0	56.7	48.4	57.5
6	Nicastro & Darpino Crt	52.0	--	42.9	52.4
7	108 No. 6th Street	50.7	--	45.1	52.9

* = long-term monitoring site

Ld = Leq during daytime hours (7 a.m. to 10 p.m.)

Ln = Leq during nighttime hours (10 p.m. to 7 a.m.)

Figure IX-7 illustrates ambient noise levels at the long-term monitoring site over a typical 24-hour weekday. Leq values recorded at 108 North 6th Street reflect noise from the adjacent school in the morning and local traffic.

FINDINGS

- Patterson has not experienced a great degree of seismic activity. The primary seismic hazards in Patterson are related to groundshaking and soil liquefaction.
- The California Division of Mines and Geology estimates that Patterson could experience an earthquake with a maximum shaking intensity of VII to VIII on the modified Mercalli Scale, causing general alarm and moderate damage.
- The steep slopes and unstable geology of the Diablo Mountains on the western edge of the study present potential landsliding hazards.
- The San Joaquin River 100-year floodplain has been mapped for the Planning Area by the Federal Emergency Management Administration. Flooding has also occurred periodically around Patterson as a result of Salado Creek. The City and County have committed funds for a U.S. Army Corp of Engineers' feasibility study to identify solutions to the problem.
- Both structural and wildland fire hazards exist within the Planning Area. The greatest risks of wildland fires are in the brush west of I-5 and in the riparian shrubs along the San Joaquin River. The greatest structural fire hazards are from older and substandard structures in the older parts of the city.
- The primary sources of noise in Patterson are traffic on major roadways and highways, railroad operations, and industrial activities.
- In general, the areas of Patterson which contain noise sensitive uses are relatively quiet except near major roadways, the railroad tracks, and industrial areas.

BIBLIOGRAPHY

Areas Damaged by California Earthquakes, 1900-1949, California Division of Mines and Geology, 1982.

City of Patterson, *General Plan*, 1978.

City of Patterson, *General Plan Update Preliminary Environmental Impact Report*, 1985.

Stanislaus Area Association of Governments, *Environmental Resources Management Element - Geology and Seismic Safety*, June 1978.

Stanislaus County, *General Plan*, June 1987.

Stanislaus County, *General Plan Support Documents*, 1987.

Stanislaus County Department of Public Works, *Flood Management Study of Salado Creek*, Prepared by Camp Dresser & McKee Inc., December 1982.

PERSONS CONTACTED

Babcock, Gerald, Patterson Frozen Foods, Inc.

Barnes, C.A., Designed Mobile Systems, Inc.

Bonds, Zack, Pacific Tomato Growers

Chief Dispatcher's Office, Southern Pacific Transportation Company, Fresno and Tracy,

Gaiser, Dick, Fire Chief, Patterson Fire Department

Lopez, Ignacio, Public Works Director, City of Patterson

Whitman, Trenton, Hancor, Inc.

GLOSSARY

Active Fault - A fault that has moved recently and which is likely to move again. For planning purposes, "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Alluvial - Pertaining to or composed of alluvium, or deposited by a stream or running water.

Alluvium - A general term for clay, silt, sand, gravel, or similar unconsolidated detrital material deposited during comparatively recent geologic time by a stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or on its flood plain or delta, or as a cone or fan at the base of a mountain slope.

Ambient Noise Level - The composite of noise from all sources. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

A-Weighted Sound Level - The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes at the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise; measured as dBA.

Bedrock - Consolidated or cemented rocks of various types that form the earth's crust and underlie loose surficial materials including soils.

Beds; Bedding - Layers in sedimentary rocks distinguished from one another on the basis of rock type, grain size, composition, color, etc.

CNEL - Community Noise Equivalent Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 a.m. and after addition of ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

Compaction - Reduction in bulk volume or thickness of, or the pore space within, a body of fine-grained sediments in response to the increasing weight of overlying material that is continually being deposited, or to the pressure resulting from earth movements within the crust. It is expressed as a decrease in porosity brought about by a tighter packing of the sediment particles.

Consolidated Material - Soil or rocks that have become firm as a result of compaction.

Critical Facility - Includes facilities housing or serving many people or otherwise posing unusual hazards in case of damage from or malfunction during an earthquake, such as hospitals, fire, police, and emergency service facilities, utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

Decibel, (dB) - A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Earthquake - Perceptible trembling to violent shaking of the ground, produced by sudden displacement of rocks below and at the earth's surface.

Epicenter - An area of the surface of the earth directly above the focus of an earthquake.

Equivalent Energy Level (L_{eq}) - The sound level corresponding to a steady state sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8, and 24-hour sample periods.

Erosion - Movement of material (such as soil) from one place to another on the earth's surface. Agents of movement include water, ice, wind, and gravity.

Fault - A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Fault System - Two or more interconnecting fault sets.

Fault Trace - The intersection of a fault with the earth's surface.

Fault Zone - A zone in which surface disruption or rock fracture has occurred due to movement along a fault. A fault zone may be expressed as an area with numerous small fractures, breccia (essentially, fractured rock) as a fault gouge. A fault zone may be anywhere from a few meters (or yards) to two or more kilometers (1 mile or more) wide.

Fire Hazard Zone - An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Fuel Loading - The quantity of plants and other fuel per unit of land area.

Ground Failure - Mudslide, landslide, liquefaction, or the seismic compaction of soils.

Hazardous Material - An injurious substance, including pesticides, herbicides, toxic metals and chemicals, liquified natural gas, explosives, volatile chemicals, and nuclear fuels.

Inactive Fault - A fault which shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

Intensity (of an earthquake) - A measure of the effects of earthquake waves on man, structures, and the earth's surface at a particular place. The intensity at a specific point depends not only upon the strength of the earthquake, or the earthquake magnitude, but also upon the distance from the point to the epicenter and the local geology. Intensity may be contrasted with magnitude, which is a measure of the total energy released by an earthquake.

Landslide - A general term for relatively rapid mass movement, such as slump, rock slide, debris slide, mudflow, and earthflow.

Lateral Spreading - The movement of loose soils over horizontal or low-angle slopes into open areas, caused by ground motion during an earthquake.

L_{dn} - Day/Night Average Level - The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. (Note: CNEL and L_{dn} represent daily levels of noise exposure averaged

on an annual basis, while L_{eq} represents the equivalent energy noise exposure for a shorter time period, typically one hour.)

Liquefaction - A process by which water-saturated granular soils transform from a solid to a liquid state because of a sudden shock or strain.

Lurch Cracking - The development of all types and sizes of fissures in the ground, due to ground motion during an earthquake.

Magnitude (Earthquake) - A measure of the strength of an earthquake or the strain energy released by it, as determined by seismographic observations. As defined by Richter, it is the logarithm, to the base 10, of the amplitude in microns of the largest trace deflection that would be observed on a standard torsion seismograph at a distance of 100 kilometers from the epicenter.

Noise Exposure Contours - Lines drawn about a noise source indicating constant energy levels of noise exposure. CNEL and L_{dn} are the descriptors utilized herein to describe community exposure to noise.

Potentially Active Fault - (1) A fault that moved within the Quaternary Period before the Holocene Epoch (the last 2,000,000 to 11,000 years); (2) A fault which, because it is judged to be capable of ground rupture or shaking, poses an unacceptable risk for a proposed structure.

Seiche - An earthquake-induced wave in a lake, reservoir, river, or harbor.

Seismic - Pertaining to earthquakes.

Settlement - The downward movement of soils, and structures on them or in them, resulting from reduction in the voids in the underlying soils.

Shear - A kind of fracture (or fault) in rock produced by intense pressure.

Subsidence - The gradual, local settling or sinking of the earth's surface with little or no horizontal motion. (Subsidence is usually the result of gas, oil, or water extraction, hydrocompaction, or peak oxidation, and not the result of a landslide or slope failure.)

Surface Rupture - A break in the ground's surface and associated deformation resulting from the movement of a fault.

Tectonic - Of or pertaining to the forces involved in the formation of the structures and features of the upper part of the earth's crust.

Water Table - The upper surface of saturated earth material below which all the materials are saturated.

Wildland - A nonurban, natural area which contains uncultivated land, timber, range, watershed, brush, or grasslands.

SCENIC RESOURCES AND URBAN DESIGN

INTRODUCTION

The study identifies the structure and organization of Palmdale's environment, with the goal of providing a framework for future planning. The high level quality of the land for scenic and urban design is identified, and the study identifies the potential for the city to improve its scenic resources.

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

1.1

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

1.2

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

CHAPTER X

SCENIC RESOURCES AND AND URBAN DESIGN

1.1

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design.

The study identifies the scenic resources and urban design in the Palmdale Area, and identifies the potential for the city to improve its scenic resources and urban design. The study identifies the potential for the city to improve its scenic resources and urban design.

CHAPTER X

SCENIC RESOURCES AND URBAN DESIGN

INTRODUCTION

This chapter describes the structure and appearance of Patterson's environment: both natural and man-made elements. The high visual quality of the rural landscapes and trees and the generally cohesive urban pattern are the major scenic resources in Patterson.

This chapter describes the scenic resources and urban pattern in the Planning Area, analyses the scenic resources and urban design elements of the Planning Area by dividing it into six distinct areas, and evaluates the major roadways and entrances to the city.

SETTING

Patterson is located in California's Great Central Valley. The Central Valley is a vast, nearly flat depositional plain dominated by agricultural land uses. A geometric pattern of orchards, vineyards, row crops, pastures, roads, and canals dominates the landscape.

The towns and cities in the Central Valley form urban islands within the agricultural landscape. Due to the lack of topographic variation and the dense vegetation canopy in most of the older urbanized areas, smaller towns and cities are usually not very visible from outside their immediate boundaries. Concentrations of trees and high structures such as water towers and grain silos are often the only landmarks easily visible from beyond the urbanized areas.

PLANNING AREA

The hills of the Diablo Mountains form the western edge of the Planning Area, and slope gently down to the valley floor. Most of the Planning Area is relatively flat. Interstate 5, which traverses the western edge of the Planning Area, affords excellent views across the valley to the east. The San Joaquin River, which defines the eastern edge of the Planning Area, and a number of irrigation canals are the primary surface hydrologic features. The visibility of these features is generally limited to localized foreground views due to the flat topography and vegetation screening.

Four distinct types of vegetation largely determine the aesthetic character of the Planning Area:

- Agricultural croplands such as alfalfa, tomatoes, and other row crops;
- Orchards;
- The extensive tree cover within the developed portions of the city (parks, boulevards, and residential neighborhoods) accented by tall palm trees planted along major paths and activity nodes; and
- Riparian vegetation along the San Joaquin River.

Within the city, the extensive tree cover in the residential areas is the predominant scenic resource. The arrangement of these vegetation types forms a strong geometric landscape

pattern characterized by a patchwork of broad open fields and highly enclosed orchards. The small isolated clusters of tall mature trees surrounding many of the older farm buildings add a random vertical punctuation to this otherwise strong, regular pattern. With very few exceptions, the edge of the urban area is visually screened by orchards. As a result, the surrounding agricultural landscape has a high degree of visual cohesiveness, and does not convey the sense of suburban encroachment common in the agricultural areas surrounding many valley towns and cities.

OVERALL URBAN PATTERN

The original Patterson townsite is roughly defined by four streets--First Street, C Street, 7th Street, and L Street. The city was planned in the early 1900s by the city's founder, Thomas W. Patterson. Patterson envisaged a town of beauty and distinction and used the plan for Washington D.C. as a guiding design precedent. Thus the new town was given a very formal and distinctive urban pattern, with axial and diagonal boulevards emanating from a circular town center.

Outside the city center, these boulevards overlay a square grid which eventually gives way to the larger gridded township pattern of the surrounding agricultural landscape. The eastern portion of the town center abuts the Southern Pacific Railroad alignment and Second Street (Highway 33), the city's major thoroughfare.

The city's major boulevards lead to the downtown and span a gradient of city land uses, serving to unify the entire city.

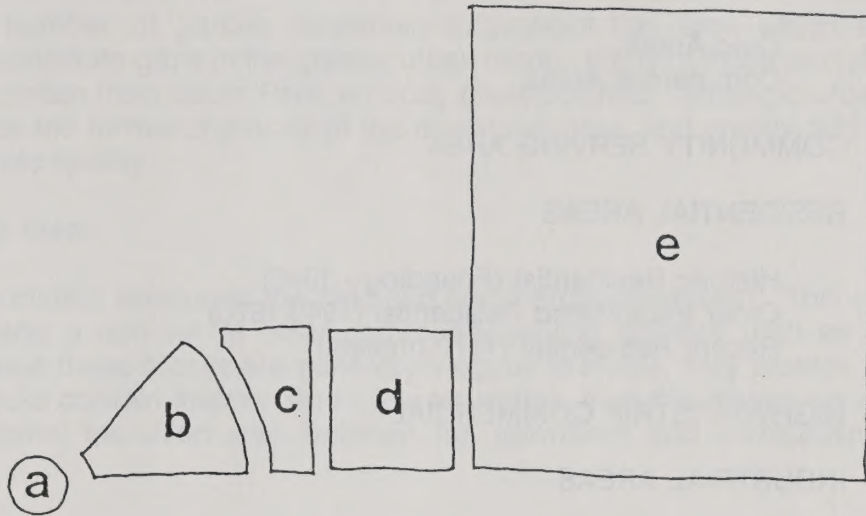
The dense concentration of mature street trees is a positive urban design asset. The boulevard plantings of mature date palm trees gives a magnificent visual quality to the eastern portion of Las Palmas Avenue from First Street to the San Joaquin River. These palms, planted at the time of the town's founding, are a distinctive and valuable scenic and historical resource. In other parts of the city, the cover of mature street trees transform residential streets into lush, shaded arcades. The City of Patterson has achieved high scenic quality and an uncommon degree of visual coherence by following a well-designed street tree plan.

North and South City Parks, which flank Las Palmas Avenue between Second Street and the Plaza circle, provide an excellent public recreation and visual amenity. The strategic location of this park area links Highway 33 and the downtown area, and thus serves as an important gateway to the city.

VISUAL RESOURCE/URBAN DESIGN DISTRICTS

Uses within the city are also clearly organized and contained in distinctive urban forms as illustrated in Figure X-1. The circular town center (Area A in Figure X-1) accommodates public parkland and the central Plaza building, an important historical and visual landmark. As the streets extend out from the plaza circle in a spoke pattern, civic and commercial uses are contained in the triangular wedges between the streets (Area B). Beyond El Circulo Avenue, a band of irregularly shaped parcels (where the circular pattern meets the grid) which also contains commercial uses and a number of public and quasi-public facilities, such as churches, schools, and meeting halls (Area C). Beyond this, residential uses predominate in small-scale square blocks (Area D, and agricultural uses surround the city (Area E).

Figure X-1
URBAN FORMS



Combined, these distinctive spatial and use patterns give Patterson a strong sense of place and a delightful, cohesive urban environment. They also provide the city with an excellent set of clearly defined design precedents for future urban growth. More recently developed urban patterns outside the original town plan, however, bear little relationship to the existing urban patterns.

The Planning Area has been divided into six principal districts for the purposes of urban design analysis. These districts are defined primarily on the basis of the predominant land use and its attendant visual and urban character. These districts are listed in Table X-1, and the boundaries are shown in Figure X-2. Descriptions of these districts and their urban design characteristics follow.

Downtown Area

The majority of the downtown commercial and civic area is defined by El Circulo Avenue. The circular town center contains a public park area and the Plaza building, the oldest structure in the city. The Plaza building currently houses the Patterson Museum and the Patterson-Westley Chamber of Commerce. A number of large palm trees tower over the area, providing flag-like landmarks visible from many parts of the city. This central plaza terminates views down the city's major boulevards, clearly marking the location of this city's central hub.

Plaza Street, which surrounds the plaza area, has a large expanse of street, parking and sidewalk pavement, with little visual relief.

TABLE X-1

VISUAL RESOURCE/URBAN DESIGN DISTRICTS

DOWNTOWN AREA

Civic Areas
Commercial Areas

COMMUNITY SERVING AREA

RESIDENTIAL AREAS

Historic Residential (Founding - 1940)
Older Established Residential (1940-1970)
Recent Residential (1970-present)

HIGHWAY STRIP COMMERCIAL

INDUSTRIAL AREAS

AGRICULTURE/RURAL RESIDENTIAL

Source: Pepper Associates, June 1988.

Surrounding this central circle is a band of civic and commercial uses contained in eight triangular blocks. The two easternmost blocks (contiguous to the Southern Pacific Railroad line and State Highway 33) contain additional public parks. These areas are richly planted with mature palm trees and a variety of deciduous canopy trees, and provide an oasis of shade and greenery in the downtown area.

The remaining six triangular blocks contain commercial and civic uses including City Hall, the police and fire stations, the library, Municipal Court, post office and Water District office. Most buildings immediately adjacent to the central plaza occupy the corner of each triangular block, and thus have a strong street presence in the Plaza circle. They provide important three-dimensional definition to the central plaza area.

Most of these buildings are distinctive and visually appealing. The Del Puerto Hotel is especially richly designed and detailed, constituting an important visual and historical landmark. There are some commercial signs in this area that are inconsistent with its character and visual quality.

Because of the strength and clarity of the downtown urban pattern, building patterns which do not conform to the overall pattern of the city are particularly apparent and disruptive. There are a limited number of locations where this strong urban pattern and attractive aesthetic character is ill-defined or in need of improvement. One such location is the corner of Third Street and Salado where a relatively contemporary building has unfortunately been set back from the central plaza, effectively creating a "missing tooth" in the overall urban fabric. An unscreened parking area occupies this strategic corner detracting from both its visual and urban design potential.

There are also a number of parcels dispersed throughout this area which are currently undeveloped, and constitute gaps in the greater urban fabric. Many of these parcels, especially those immediately across from South Park, embody great potential. Strategic urban infill could significantly enhance the formal character of the downtown area, and greatly add to its overall coherence and scenic quality.

Community-Serving Area

The majority of this district surrounds the civic and commercial downtown. This area contains several churches, and a number of other community-serving facilities such as schools and medical offices. Since these blocks are generally irregular in shape, they provide added visual interest. These blocks contain intermediate-scale structures, thus this district serves as both a physical and functional transition area between the downtown and surrounding residential neighborhoods.

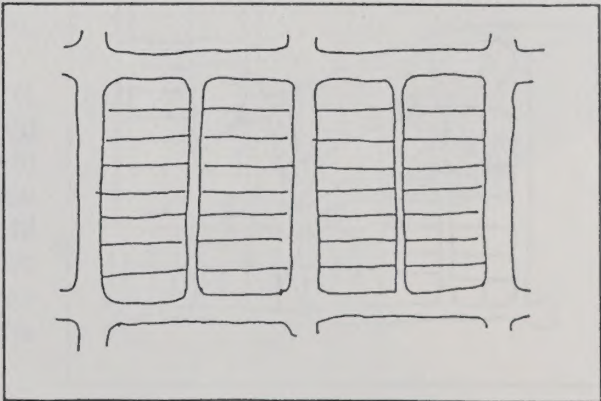
Residential Areas

Residential Areas are divided into three sub-districts: Historic Residential, Older Residential, and Recent Residential. These sub-districts reflect three general periods of development respectively; 1910 to 1940, 1940 to 1970, and 1970 to present. Each sub-district has a distinctive visual and urban character.

Historic Residential

This district was originally planned at the time of the town's founding, thus the street and block patterns in this area have been in place for many years. Residences in this district, however, have been built over a number of years, gradually filling in the established block pattern. While the earliest homes in the area date to the early 1910s, some homes were constructed within the last decade. This district also contains a variety of housing types and scales.

The distinctive block pattern is shaped by a very regular gridded street pattern, with well-defined blocks of similar size and orientation. The parcelization pattern is also highly regular, with almost all residential parcels of similar size and proportion. Nonetheless, variations in housing types and periods of construction have kept these neighborhoods rich in character. The overall orderly housing pattern is aesthetically pleasing with individual dwellings adding articulation and aesthetic diversity.

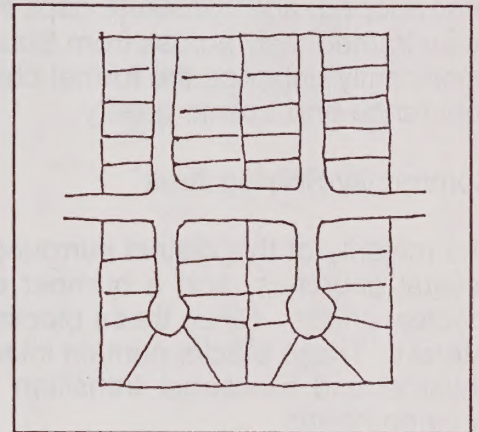


Each block is divided by an unpaved alley which provides access to a number of garage units and other backyard structures.

Mature street trees line the streets throughout these neighborhoods. These trees provide an important widespread scenic amenity, and also play an important role in unifying the aesthetic character of these neighborhoods.

Older Residential

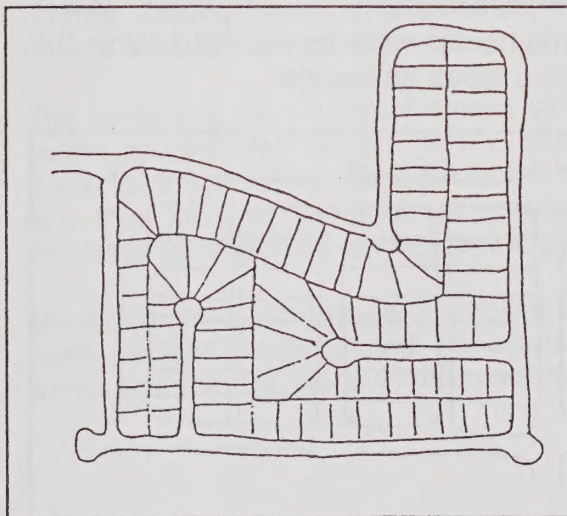
The older residential areas within the city were developed generally during the 1940-1970 period. The homes in this district resemble many of the homes in the historic residential district. The block and street patterns, however, are generally less geometric. Although many streets are laid out in square blocks, there are also many which end in cul de sacs. This eroded grid pattern has circulation patterns that are quite different from those in the historic residential parts of the city.



These areas are generally well landscaped with mature trees and vegetation, however, the presence of street trees is not as strong as in the historic residential district. Street patterns in this district have only a weak relationship to the original city plan. They are generally not strongly linked to the city's major boulevards, and do not reflect the city's formal organization. As such, they exist somewhat independently of the larger urban patterns.

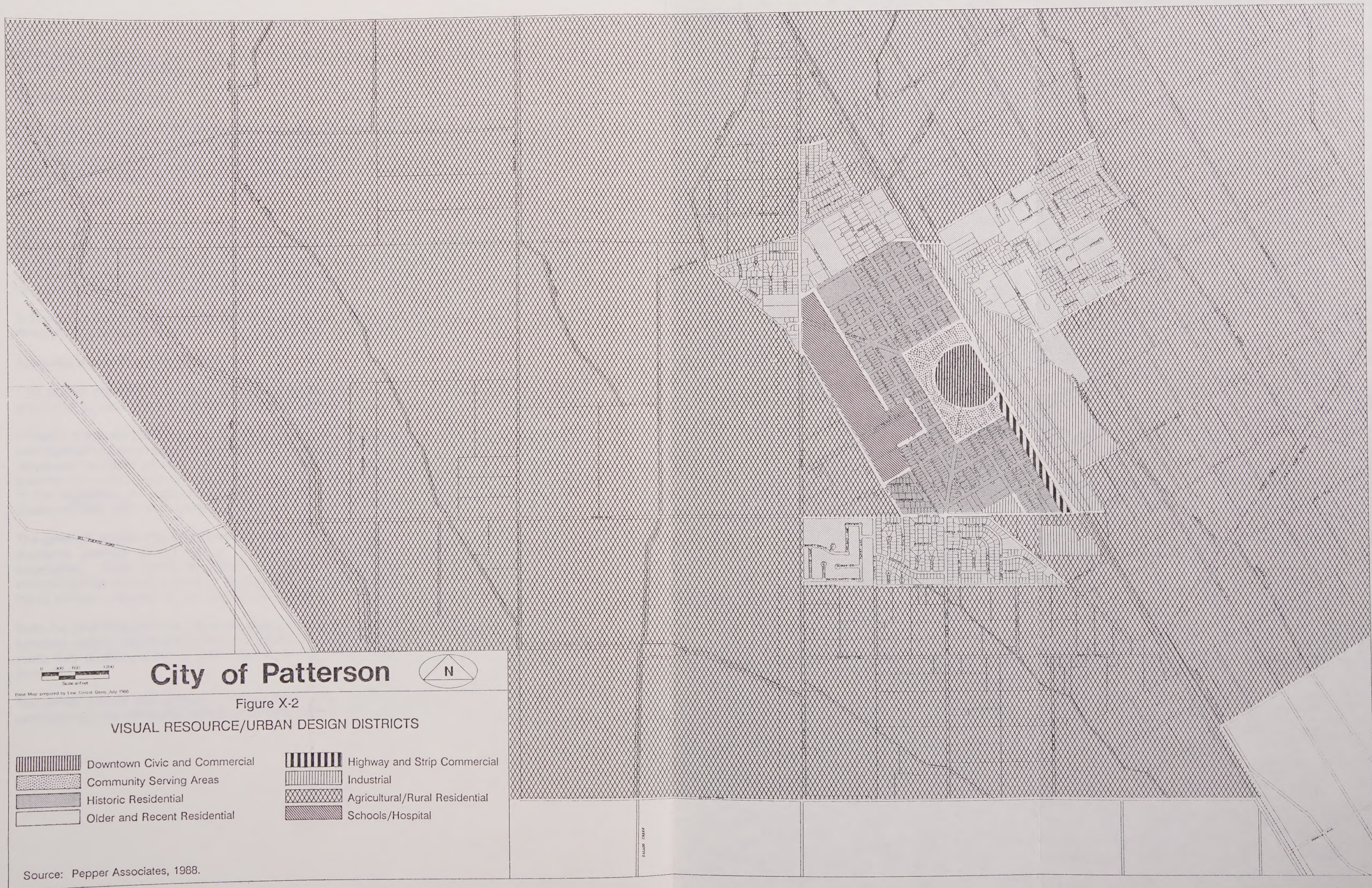
Recent Residential

The city contains several areas of recent residential construction. These areas of the city have a discernably different urban pattern and aesthetic character from the older development patterns. The clearly organized, formal grid pattern of the historic residential districts is replaced by informal, irregular block patterns with curving streets and many cul de sacs. This street pattern, typical of much of the recent suburban development in California, lacks the strong sense of organization and orientation found in historic residential areas. It also lacks a sense of connection to the downtown and community at large.



The site planning of these areas is also characterized by an inward focus. Homes are generally oriented toward the inner portions of the development. Large walls and fences often line major access streets to these developments, augmenting the appearance of detachment from the rest of the city. Thus these development patterns tend to exclude, rather than embrace the city as a whole.

Another attribute common to these areas is the lack of mature landscaping. Ironically, although some of



these new subdivisions were sited in established orchards, none of the mature vegetation was retained in the new development.

Commercial Strip Areas

Commercial strip uses in Patterson are confined to the west side of Highway 33 (Second Street). This area primarily accommodates agricultural and auto-related businesses. The density of buildings is low, and buildings themselves are generally unobtrusive. However, a number of large areas of deteriorated pavement detract from the area's visual quality.

Industrial Areas

Patterson's primary industrial area is contiguous to First Street, the railroad alignment, and State Highway 33. This area is dominated by the Patterson Frozen Foods Company. Industrial structures such as silos and water tanks are prominent city landmarks. This industrial area constitutes an important element in the city's overall visual character because it is located along the primary entrances to town and has the largest structures in the city.

A second, smaller industrial area is contained in two pockets along Sperry Avenue and Poppy Avenue. Agricultural-related industrial uses predominate in this area.

Agricultural and Rural Residential

This district consists of lands in agricultural production as well as lands containing ranchettes and farmhouses. The transition between this district and the urban uses takes several forms.

In much of this district the scenic quality is quite high. Although most agricultural operations are well maintained, even poorly maintained outbuildings have a picturesque character. Agricultural crops and orchards provide important scenic elements and the rural residences and farms give a sense of human scale to the district. Due to the flat topography, and the height and density of the vegetation in much of this district, the urbanized portion of the Planning Area is largely screened from view from these surrounding agricultural and rural lands.

The greatest spatial and visual contrast in the Planning Area occurs in this district. Established orchards provide strong spatial enclosure and constitute visually-impermeable walls of vegetation. Since orchards provide a near continuous ring around the urban areas, the screening they provide serves to visually contain urban development. Croplands, on the other hand, consist primarily of low-lying crops, creating the open quality of the Central Valley.

Both the orchards and row crops are characterized by strong geometric patterns. The heights, spacing, edges, colors and textures of each field or orchard have a great deal of uniformity. As such, this landscape has a strong formal aspect, not unlike the pattern of the city's original townsites.

The small clumps and groves of mature trees which typically surround farm buildings accent and interrupt the otherwise strong geometric pattern of these croplands.

PRIMARY CIRCULATION ROUTES AND CITY ENTRIES

Three major streets constitute the primary paths which define and serve the city's major districts: Highway 33 (Second Street), Las Palmas Avenue, and Sperry Avenue.

The city's primary entrances along Highway 33 are dominated by industrial and strip commercial uses. Although these entry points are clearly marked by signs, the built environment does not support this clear sense of entry. The south city entry is dominated by an automobile dealership. The north city entrance is characterized by agricultural uses and open lands.

Conversely, the Las Palmas Boulevard entrance to the city from the east is strongly and beautifully marked with rows of mature palms on each side of the street. This entrance is, therefore, both clearly-defined and very aesthetically pleasing.

Although the Sperry Street entrance from I-5 occurs at an area of transition from agriculture to urban development, it does not create a memorable city entryway. The recently constructed residential development near this entrance is dominated by a large wall separating residences from the roadway, and does not provide a welcoming or "friendly" entrance to the city.

Scenic Highways

Scenic Highways are segments of federal, state, or local roads that have been designated by the state or local government as roads traversing scenic corridors and for which the state or local government has developed a program for protection of the scenic corridor. There are three levels of scenic highway designation: State Scenic Highways, County Scenic Highways, and Local Scenic Highways. At the present time there are no roads in the Planning Area designated as or under consideration for designation as Scenic Highways. Las Palmas Avenue warrants consideration for inclusion as a local or county scenic highway.

FINDINGS

- Patterson's original townsite is characterized by distinctive, clearly-defined, formal urban patterns. Composite street patterns (circular town center, axial and diagonal boulevards, and residential grid) give the city a strong sense of "place" and enhance the city's overall coherence.
- Uses within the city are clearly organized and contained in distinctive block configurations.
- The extensive cover of mature street trees provides a high quality scenic amenity and cohesive visual character. The City has a highly successful street tree program.
- The overall urban structure and visual character of Patterson benefits from its clearly-defined, focused commercial and civic area downtown. The absence of competing commercial areas in Patterson has enabled the downtown to remain the focus of pedestrian/recreational activity.
- The downtown contains a number of distinctive and visually appealing buildings. Most commercial and civic buildings in this area are of a scale and character appropriate to the block and street pattern.
- The introduction of new building forms and patterns that do not conform to the city's existing urban configurations would be particularly apparent and disruptive.
- The downtown area contains a number of vacant lots, providing potential for urban infill.
- The central plaza functions as both the focus or "hub" of downtown, and as a visual terminus for views down the city's primary streets (view corridors).
- The Community Serving District provides a successful physical and functional transition between downtown commercial area and surrounding residential neighborhoods. Both the irregularly-shaped block patterns, and the scale and design of community serving facilities add visual interest and distinctiveness to this district.
- While the originally established block pattern of the Historical Residential District is clearly defined, bearing a strong, successful relationship to the city as a whole, the block/street patterns in the Older and Recent Residential Districts fail to achieve this.
- The majority of the city's strip commercial development is modest in scale and generally unobtrusive. Additional commercial infill development consistent with good urban design practice could enhance this commercial corridor.
- The large industrial area located along Highway 33 constitutes an important element in the city's visual character and does not intrude unduly into the downtown area. The visual relationship between this area and contiguous uses could benefit from additional landscape treatments, however.
- The city entrance at East Las Palmas Avenue is beautifully marked with rows of mature date palms, creating a delightful and memorable city entrance.

- North and south city entrances on Highway 33 and the west city entrance on Sperry Avenue warrant clarification and visual upgrading, primarily through landscape treatments.
- The agricultural lands that surround the city are highly scenic, characterized by their strong geometric patterns. Agricultural lands form a patchwork of open and closed landscapes. The orchards function as a visual container for the city by visually screening urban development and the croplands provide expansive views.

COMMUNITY DEVELOPMENT STRATEGY

The report outlines the results of an extensive consultation process with the community, including a series of focus groups and a public consultation session, and a summary of the findings of the consultation.

The consultation process was carried out in a number of ways, including a series of focus groups, a public consultation session, and a series of one-to-one interviews with community members.

On April 27 and 28, 2010, the Community Development Strategy was presented to a series of focus groups, including a series of focus groups with the community, a series of focus groups with the community, and a series of focus groups with the community.

In addition, the community was consulted on a number of issues, including a series of focus groups, a series of focus groups, and a series of focus groups. The community was also consulted on a number of issues, including a series of focus groups, a series of focus groups, and a series of focus groups.

The report also includes a series of focus groups, a series of focus groups, and a series of focus groups. The report also includes a series of focus groups, a series of focus groups, and a series of focus groups.

The report also includes a series of focus groups, a series of focus groups, and a series of focus groups. The report also includes a series of focus groups, a series of focus groups, and a series of focus groups.

APPENDICES

The report also includes a series of focus groups, a series of focus groups, and a series of focus groups. The report also includes a series of focus groups, a series of focus groups, and a series of focus groups.

APPENDICES

The report also includes a series of focus groups, a series of focus groups, and a series of focus groups. The report also includes a series of focus groups, a series of focus groups, and a series of focus groups.

APPENDIX A

COMMUNITY CONCERNS SUMMARY REPORT

This report summarizes the results of an intensive three-pronged effort to identify community concerns about growth and development in the city of Patterson as the basis, in part, for data collection and policy development in connection with the revision of the Patterson General Plan.

The Consultants conducted a townhall meeting on April 6, 1988, at Patterson High School. The meeting was attended by approximately 90 residents of the Patterson area.

On April 27 and 28, 1988, the Consultant Team, headed by J. Laurence Mintier & Associates, conducted a series of informal interviews with City officials, including the five City Council members, five Planning Commissioners, and City department heads.

In addition to the interviews and townhall meeting, the City solicited comments from residents on their concerns by distributing a Community Response Form. This form was published in the *Patterson Irrigator*, mailed to the City's utility customers, made available at City offices, and distributed at the townhall meeting. By the end of May, the City received 175 completed forms.

All three efforts generally sought residents' responses to three questions: 1) what are the positive qualities or assets of Patterson; 2) what are the problems with Patterson; and 3) what issues should be addressed in the General Plan. There was obvious overlap in responses to the questions.

This report summarizes responses to these three general questions from the interviews, the townhall meeting, and the Community Response Forms. This summary does not purport to be a scientific opinion survey, such a survey not being necessary for the purposes of general issue identification. Rather, it records the Consultants' impressions of residents' perceptions of and concerns about Patterson. No attempt has been made in this summary to edit out contradictory comments or comments critical of City officials or to make the comments fit preconceived notions about the problems or opportunities facing Patterson.

POSITIVE QUALITIES AND ASSETS

The Community Response Form asked residents to list the three most important assets or qualities of Patterson which should be preserved or enhanced. The same question was asked during the individual interviews and at the townhall meeting. Three qualities stand out as the most important to Patterson residents: the small town, rural atmosphere; Patterson's unique downtown area; and the trees in Patterson.

Small Town, Rural Atmosphere

Most Patterson residents clearly like living in a small town, particularly for the social and cultural qualities that are often associated with small town living. Many mentioned the friendliness of Patterson's residents, the personal service from local business people, the sense of personal safety, the level of community concern and involvement, and the quality of life. Others appreciated Patterson because it is quiet and clean.

Aspects of the natural environment that give Patterson its rural quality were also mentioned. Many described the beauty of the town and its quiet atmosphere and serenity. Several mentioned the farmland and orchards, open space, and the city's clean air.

The Downtown Area

For many Patterson residents, the downtown area, or the "circle", is the key to Patterson's identity and heritage. It is the town's hub, heart, and focus. The unique spoke pattern of the streets and the historic buildings were mentioned frequently as distinct assets which should be preserved.

Trees

The trees in Patterson clearly are considered by many Patterson residents as fundamental to the city's charm and identity. Many Patterson residents express great sentimental attachment to the palm trees which line Las Palmas Avenue. Trees in general and the city's tree-lined streets were repeatedly listed as important features of Patterson.

Two other qualities mentioned frequently but less often than the first three include: the city's historic buildings and heritage and a range of public facilities and services.

Historic Buildings and Heritage

Patterson has a rich historic heritage reflected in its residents, culture, and structures. Many of the residents' families have lived in Patterson for generations. The city's heritage and historic buildings were listed often as important to Patterson residents. Specific buildings cited include the Del Puerto Hotel and the city's museum building. Many residents appreciated the historic quality of downtown. The older houses and neighborhoods were also mentioned by several residents as important features.

Public Facilities and Services

The city's parks were listed as an asset by many residents, particularly the downtown park area. Residents generally wanted expansion of parks and more recreational programs.

Many residents described Patterson's Police Department as a significant asset to city living. Other public facilities and services praised included the city's wide streets, its schools, hospital and medical facilities, fire department, and library.

Other Qualities and Assets

Other qualities and assets mentioned at least once by residents include the following:

- Affordable living
- Skyline view
- Proximity to Interstate 5
- East Las Palmas entry
- Housing quality
- Separation of residential and industrial development
- Large residential lots

- Apricot Fiesta
- Stores within walking distance
- Minimum of industry within city limits
- Growth
- Annual cleanup
- School property
- Water
- Churches
- Cemetery
- Paramedic service
- Sanitation service
- Progressive city/school staff
- Library reading hour for pre-school children
- School lunch program
- Del Puerto Canyon
- One-way streets in downtown circle
- Parking
- Right to vote for local mayor
- Mayor
- Local newspaper
- Crime prevention
- Jobs
- Centrally-located downtown business district
- Older Spanish architecture
- Good climate
- Compatibility of ethnic groups

PROBLEMS

The Community Response Form asked residents to list the major growth problems facing the City of Patterson. Similarly, those attending the townhall meeting and those individuals interviewed were asked to identify major problems in Patterson. The problems most often mentioned included the need for greater commercial development, traffic and parking, public services, the lack of recreational and entertainment facilities, and growth and planning issues.

Lack of Commercial Development

Topping the list of concerns about Patterson was the need for greater commercial development. Residents felt strongly that there is a need for greater shopping opportunities and greater competition. The lack of a shopping center or mall, major chain stores, supermarkets, and restaurants were described most often as the city's chief inadequacies.

Traffic and Parking

Traffic and parking were perceived by Patterson residents as significant problems for future growth. In particular, traffic and parking problems downtown were considered major constraints, considering the circular street pattern and five- and six-way intersections. Safety at these intersections was also a concern. Other specific traffic problem areas mentioned were Sperry Avenue, Las Palmas Avenue, and Highway 33.

Some residents' concern over future road expansion related to the potential for removing the trees along major thoroughways. Other residents expressed concern over the speed limit on Sperry Avenue and general traffic enforcement.

Public Services

A number of publicly-provided services were described as problems in association with future growth. The most frequently mentioned concern was school overcrowding. Financing schools and the siting of new campuses were also listed as potential problems.

Residents also expressed great concern over the city's sewer system, particularly the limitations on its capacity and the expense to expand it. Concerns over limitations in the city's water system and supply were also mentioned quite often.

Local drainage and flooding problems, particularly related to Salado Creek, were also related. Police service, the future of the volunteer fire department, the lack of medical services, particularly nursing/convalescent homes, road and street repair, the lack of public transportation, and limited library resources were also described as problems.

Recreation and Entertainment Facilities

The lack of parks and recreational facilities was frequently mentioned as a problem in Patterson. Many residents cited the need for a large park with recreational facilities and for a public swimming pool. Other desired facilities included a community center, golf course, and a senior center. The need for greater youth-oriented recreational opportunities was mentioned frequently.

Patterson residents also described a deficiency in entertainment facilities; their wish list included a theater, more restaurants, fast food restaurants for youth, and a bowling alley.

Growth/Planning Issues

A major category of problems identified by residents concerns the pace and quality of development in Patterson. Many residents are concerned about the impact of urban growth on agricultural lands, air and water quality, and the loss of Patterson's rural quality.

Some residents said that Patterson is growing too quickly, and that growth is changing the character of Patterson for the worse. A number of residents felt that there has been too much residential development. Most residents were concerned about unmanaged, unplanned growth. Many expressed concern over future kinds of development patterns, particularly over the separation of residential and industrial development.

Residents were also concerned with the quality of housing. Several residents felt there was too much low income housing in Patterson, while others felt that there was a lack of affordable housing and available rentals.

Miscellaneous Problems

Outside these broad categories of concerns, residents mentioned a host of other problems with Patterson, including:

- Drug problem
- The environment
- Noise
- Air pollution
- Toxic chemicals
- Litter near the high school
- Latch key children
- Racial imbalance
- No clear city identity
- Detention basin along Las Palmas
- Business community needs to agree about its future
- Postal service
- Industry not compatible with a bedroom community
- Not enough employment
- Lack of youth employment
- Lack of well-paying/white collar jobs
- Not finishing projects before starting others
- Existing shabby, unsightly areas
- Antiquated zoning standards
- Lots are too small in new housing development
- Small-town parochial attitudes
- Too much patch-work planning
- Lack of fresh produce in grocery stores
- No pedestrian crossing light at Las Palmas and Highway 33
- City hall chambers are not large enough
- East-west split in income and ethnicity

City Government

Of a different nature were complaints or comments residents expressed about the management of the City. These included:

- Lack of concern for new residents
- Too much attention paid to new residents
- Attitude of local officials
- More attention should be paid to citizen concerns
- Quicker city council action on proposals
- Voter apathy
- Extend term of mayor from two to four years
- Leadership in city council
- Too much industry control of city government
- Government red tape
- Lack of respect for original Patterson residents
- Lack of aggressive problem-solving

ISSUES THAT SHOULD BE ADDRESSED IN THE GENERAL PLAN

Responses to the questions about Patterson's assets and problems clearly identify major issues to be addressed in the General Plan. This section summarizes other issues identified in the interviews, at the townhall meeting, or in the Community Response Forms that do not fit easily into either of the two preceding categories or are of a very specific nature.

General Issues

- Attract more industry
- Improve rundown areas
- Develop more quality housing
- Develop condominiums
- Develop long-term architectural plan
- Planned growth
- Attract more people
- Stop industrial development
- Proper zoning
- Avoid strip development
- Direction of growth
- Expansion
- Balance population growth with commercial/industrial development
- Financing city services
- Need to foster long-term economic health
- Phase growth
- Set high standards for new development
- Protect the visual quality of the community

Specific Recommendations

- Close off circle to vehicular traffic
- Require larger residential lots
- Remove walls around new subdivisions
- Convert the circle to a mall
- Let Patterson Frozen Foods close off First Street
- Do something useful in the Fifth Street area of Northmead School
- Make the circle into a parking area
- Build a buffer to hide the industrial area along Highway 33
- Remove the historic monument in circle
- Move city hall out of downtown
- Change the light industrial area at Poppy and Sperry
- Enhance the East Las Palmas entrance
- Improve downtown area
- Spruce up industrial area near Patterson Frozen Foods plant
- Develop sign ordinance
- Implement rent control
- Develop more stringent building codes
- Convert the old town look with modern stores
- Convert the residential area between So. 2nd Street and 4th to commercial
- Implement more traffic rules education
- Develop more handicapped parking

- Clean up So. 3rd Street
- Require curbs and gutters on all streets
- Do not amend General Plan after adoption
- Extend Apricot Fiesta to a full week
- Install stop signs in residential areas
- Route through-traffic outside city limits
- Improve intersection at First Street and Las Palmas
- Clean up alleys
- Clean up low income housing areas
- Landscape new subdivisions
- Develop subdivisions on the outer edges of town
- Remove some of the downtown bars
- Place greater restrictions on the construction of fences
- Better control of new businesses
- Develop a new motel
- Develop a fruit/vegetable stand
- Make Patterson the "Carmel" of the valley
- Longer business hours
- Clean up trash
- Clean up junk cars
- Enforce noise control laws
- Provide summer school for children of all incomes
- Extend library hours
- Combine fire department and ambulance service
- Need industrial park
- Attract clean industry
- Expansion of city facilities
- Developers should finance growth
- Keep single family and multi-family residential development separate
- Dedicate improved parks and streets as part of subdivision process
- Pay careful attention to downtown land use
- Install speed bumps in residential subdivisions
- Maintain distinctive Westside community identity
- Develop detention basins away from street view
- Grow west toward I-5
- Consider need for auto dealership area
- Emphasize joint park/detention basin use
- Industrial development should be oriented toward I-5
- Keep the banks downtown
- Consolidate administrative office in city, allow police and fire departments to relocate
- Consider canals as city develops, need fencing
- Do not expand past Poppy Avenue to the south
- Develop homes with two-car garages
- Preserve downtown as a historic district
- Consider the impact of the County waste-to-energy facility on I-5
- Consider the impact of the tire-burning plant on Patterson
- Consider the future of the Navy base
- Develop parks adjacent to schools
- Need to protect rights-of-way for future street expansions
- Develop Sperry bypass

LIST OF THOSE INTERVIEWED

City Council Members

Wade Bingham, Mayor
Kay Corwin
Leo Halseth
Angelo Ielmini
Tom Klein

Planning Commission Members

Sam Hibma, Chairman
Peter Buchanan
Claude Delphia
Robert Glick
Mary Solorio-Brandt

City Staff

Dick Bull, Police Chief
Dick Gaiser, Fire Chief
John Nachbar, City Manager

APPENDIX B

AVAILABLE HOUSING PROGRAMS

This appendix summarizes those federal, state, and local programs currently available that the City of Patterson might pursue to implement City housing policies. The program summaries are based on program descriptions contained in HCD's March 1987 Directory of Housing Programs, CHFA's September 1986 Annual Report, HUD's 1985-86 summary of programs, and FmHA's 1984 Brief History of FmHA. Eligible sponsor/applicants for each federal and state program are also indicated as follows:

1. City or county;
2. Housing authority;
3. Special district;
4. Non-profit organization;
5. For-profit organization or developer; and
6. Individual.

FEDERAL PROGRAMS

Department of Housing and Urban Development/Federal Housing Administration

The U.S. Department of Housing and Urban Development (HUD) and its constituent agency, the Federal Housing Administration (FHA), administer a variety of mortgage insurance, rent subsidy, and loan and grant programs aimed at helping communities provide affordable housing for low- and moderate-income citizens.

Depending on the program, eligible applicants include both nonprofit and profit-motivated sponsors and builders, public agencies, the elderly, the disabled, and individuals with incomes below the area median, as well as those of moderate income. Programs range from conventional single-family and mobilehomes to multi-unit and cooperative housing.

The Department of Housing and Urban Development administers its programs through ten regional offices, and within those regions there are 73 area offices.

For information on HUD-sponsored programs, contact the local field office. In the Patterson area contact:

1315 Van Ness Avenue
Fresno, CA 93721
(209) 487-5033

Home Improvement Loan Insurance (Title I, Section 2)

HUD insures loans to finance major and minor improvements, alterations, and repairs of individual homes. The loans may be up to \$17,500 and may extend up to 15 years and 32 days. Loans on apartment buildings may be as high as \$8,750 per unit, but the total for the building may not exceed \$43,750, and the term may not exceed 15 years. Private lending institutions process these loans.

Eligibility: 6

Manufactured Homes (Title I, Section 1)

HUD provides insurance on loans by private lenders to finance the purchase of manufactured homes, thereby providing alternative lower-cost housing. The maximum loan is \$45,500, whether single or multi-section home, \$54,000 for a manufactured home and a suitable developed lot, and \$13,500 for developed lot only. The maximum loan term is 20 years for a single unit and lot, 25 years for a double unit and lot, and 15 years for a lot only.

Eligibility: 6

Manufactured (Mobile) Home Insurance (Title I, Section 2)

This program insures loans to purchase manufactured home units by buyers intending to use them as their principal place of residence. (Note the previous Title I Section 1 program insures loans on manufactured homes and lots.) The maximum loan is \$40,500, whether single or multiple modules. The borrower must assure that the unit will be placed on a site which complies with FHA standards and local zoning requirements.

HUD insures private lenders against losses of up to 90 percent of any single loan. Insurance coverage is limited to 10 percent of the total amount of the loans insured by the lender. The loan term may extend for up to 20 years and 32 days.

Eligibility: 6

Lower Income Rental Assistance (Section 8)

This program aids low- and very-low income families in obtaining decent, safe, and sanitary housing in private accommodations. HUD makes up the difference between what these families can afford and the fair market rent for an adequate housing unit. Eligible tenants must pay the highest of either adjusted income, 10 percent of gross income, or the portion of welfare assistance designated to meet housing costs. This rental assistance may be used in existing housing, new construction, and moderately or substantially rehabilitated units.

Eligibility: 2,4,5,6

Moderate Rehabilitation Program (Section 8)

This program encourages the rehabilitation of rental property for occupancy by Section 8 recipients. The program does not provide financing for rehabilitation, instead, it guarantees Section 8 payments to the owner of rehabilitated developments whenever eligible tenants reside in the project. Prior to undertaking rehabilitation work, the owner and the local Housing Authority

will provide technical assistance in obtaining financing and for the rehabilitation. Once the work is completed, the Housing Assistance Payments contract is executed and operates for a 15-year period.

Moderate rehabilitation is defined as rehabilitation involving only a limited amount of work on a dwelling unit, which can be accomplished with the tenants in place. Temporary relocation or permanent displacement should not be required except in limited circumstances.

Eligibility: 2,4,5,6

Rental Housing Rehabilitation (Section 17)

This program is intended to increase the stock of affordable rental housing for lower-income renters (80 percent of the area median) by providing grants to state and local governments to support the rehabilitation of existing rental units and by providing rental housing assistance to lower-income families to enable them to afford the rents of units in assisted projects. Grants are awarded on a formula basis to cities with populations of 50,000 or more, urban counties, and states, for rehabilitation of privately owned, primarily residential, property. Rehabilitation subsidy for each project is limited to an average of \$5,000 per unit, adjusted for high cost areas, and 50 percent of the project's total eligible rehabilitation costs. No funds may be used for program administration. Vouchers and Section 8 certificates are provided to permit eligible tenants to remain in rehabilitated units and/or eligible new tenants to move into the units.

HUD distributes the funds based upon a formula which considers three factors: (1) number of rental units where the income of tenant households is at or below the poverty level; (2) number of rental units built before 1940, where the income of the household is at or below the poverty level; and (3) number of rental units with at least one of four housing problems--overcrowding, high rent costs, incomplete kitchen facilities, or incomplete plumbing. The third factor is weighted double in the formula.

Eligibility: 1

Housing Development Grants (HODAG)

This grant is intended to increase the availability of rental housing for lower income people in areas where there is a severe shortage of such housing. Development grants are used to help private developers construct or substantially rehabilitate rental housing in those areas.

All projects assisted by development grants must reserve at least 20 percent of the units for families with incomes at or below 80 percent of the median income of the area. Owners of projects must agree to keep the assisted units available for occupancy by lower income tenants for 20 years and must agree not to convert the units to condominiums during the 20-year period.

Development grants cannot exceed 50 percent of the total cost, less acquisition, rehabilitating, or developing the building. Once selected, the projects must be under construction within 24 months of HUD approval. When construction or rehabilitation of a project has been completed and the project reaches a certain level of occupancy, it will be closed out by HUD. At that time, the city, urban county, or state will become responsible for monitoring project operations and approving rent increases.

Multi-family Rental Housing (Section 207)

HUD insures mortgage loans made by private lenders to finance the construction or rehabilitation of multi-family rental housing by private or public developers. Projects must contain at least five units and should be able to accommodate families at reasonable rents. Maximum mortgage limits range from \$9,500 to \$36,000, depending on unit size. Section 207 also insures lenders against loss on mortgages used to finance the construction or rehabilitation of mobilehome parks with five or more space, at a maximum of \$9,000 per space.

Eligibility: 2,4,5

Cooperative Housing (Section 213)

HUD insures mortgages made by private lenders on cooperative housing projects of five or more units to be occupied by members of nonprofit cooperative housing corporations. These loans may finance new construction, rehabilitation, acquisition, improvement or repair of a project already owned and resale of memberships: construction of projects composed of individual family dwellings to be bought by individual members with separate insured mortgages; and construction or rehabilitation of projects that the owners intend to sell to nonprofit cooperatives.

Eligibility: 4

Homeownership Assistance for Low- and Moderate-Income Families (Section 221 (d)(2))

HUD provides mortgage insurance to increase homeownership opportunities for low- and moderate-income families, especially those displaced by urban renewal. HUD insures lenders against loss on mortgage loans to finance the purchase, construction, or rehabilitation of low-cost, one-to four-family housing. Maximum insurable loans for an owner-occupant are \$31,000 for a single family home. For a larger family (5 or more persons), the limits are \$36,000 or up to \$42,000 in high costs areas. Higher mortgage rates apply to two-to four-family housing.

Eligibility: 6

Multi-family Rental Housing for Low- and Moderate-Income Families (Section 221 (d) (3 & 4))

HUD offers mortgage insurance to finance rental or cooperative multi-family housing for moderate-income households. HUD insures mortgages made by private lenders to help finance construction or substantial rehabilitation of multi-family (5 or more units) rental or cooperative housing for moderate income or displaced families. Projects in both cases may consist of detached, semi-detached, row, walk-up, or elevator structures.

Eligibility: 1,2,4,5

Existing Multi-family Rental Housing (Section 223 (f))

HUD insures mortgages to purchase or refinance existing multi-family projects originally financed with or without federal mortgage insurance. HUD may insure mortgages on existing multi-family projects under this program that do not require substantial rehabilitation. Projects must contain at least five units and must be at least three years old.

Eligibility: 4,5

Rental Housing for the Elderly (Section 231)

To assure a supply of rental housing suited to the needs of the elderly or disabled, HUD insures mortgages made by private lending institutions to build or rehabilitate multi-family projects consisting of eight or more units.

Eligibility: 1,2,4,5

Mortgage Insurance: Nursing Homes and Intermediate Care Facilities (Section 232)

HUD insures lenders against loss on mortgages used to finance construction or renovation of facilities to accommodate 20 or more patients requiring skilled nursing care and related medical services, or patients who, while not in need of nursing home care, are in need of minimum but continuous care provided by trained personnel. Nursing home and intermediate care services may be combined in the same facility covered by an insured mortgage or may be in separate facilities. Major equipment for operation may be included in the mortgage.

The maximum insured amount of the loan cannot exceed 90 percent of the estimated value of the physical improvements and major movable equipment. The maximum mortgage term is 40 years.

Section 437 of the Housing and Urban-Rural Recovery Act of 1983 allows insurance of board and care homes under Section 232. These facilities do not have medical services but have 24-hour staff for continuous protective oversight of residents. A board and care home can be either freestanding or part of a complex that could also include a nursing home, an intermediate care facility, or both.

Eligibility: 4,5

Mortgage Insurance: Experimental Housing (Section 233)

Two distinct housing assistance programs operate under Section 233. Their common goal is to encourage, by means of insured loans, the use of new or untried construction materials, designs or techniques for reducing housing costs, raising living standards, and improving neighborhood design. Provisions of other HUD programs can apply to those aspects of the project where nonexperimental features are utilized.

HUD/FHA insures mortgage loans that finance the construction or rehabilitation of homes meeting the requirements of other FHA-mortgage insurance programs except that the use of

advanced technology or experimental neighborhood design is required. The average insured mortgage is \$65,000. Eligible applicants are persons able to prove that the proposal is an acceptable risk for testing advanced housing design or experimental property standards.

This Section 233 program provides mortgage insurance to encourage innovative design features in multi-family housing. Title II provisions apply where nonexperimental features are utilized. The type of construction, mortgage limit, down payment, term, interest rate, and fees are governed by eligibility requirements of the applicable multi-family mortgage or improvement loan insurance program.

Eligibility: 4,5,6

Condominium Housing (Section 234)

HUD insures mortgages made by private lenders for the purchase of individual family units in multi-family housing projects. Sponsors may also obtain FHA-insured mortgages to finance the construction or rehabilitation of housing projects which they intend to sell as individual condominium units. Projects must contain at least 4 units and may be detached, semi-detached, row, walk-up, or elevator structures. Recent changes in legislation also permit insuring mortgages on individual units in existing condominiums.

Eligibility: 4,5,6

Mortgage Insurance: Special Credit Risks (Section 237)

The purpose of this program is to make home ownership possible for low-and moderate-income families who cannot meet requirements under Section 203, 220, 221, or 234. The monthly mortgage payment (principal, interest, insurance, and taxes) may not exceed 25 percent of the borrower's annual income. The maximum insurable mortgage is \$18,000 (\$21,000 in areas where cost levels so require).

Counseling assistance must be obtained by the applicant mortgagor from a HUD-approved counseling agency. The down payment required is determined by the requirements for the HUD program under which the application originates. Applications may be originated under most HUD home mortgage programs. The mortgage term may extend for 30 years, or for 35 to 40 years where the purchaser is unacceptable under a 30 year term.

Eligibility: 6

Supplemental Loan Insurance: Multi-family Rental Housing (Section 241)

This program supplements existing insured mortgages and does not require refinancing the existing mortgage. HUD insures lenders against loss on loans made either (1) to finance additions and improvements of multi-family housing projects, group practice facilities, hospitals, and nursing homes subject to HUD/FHA insured mortgages or mortgages held by HUD, or (2) to finance energy conservation improvements. A loan involving an insured nursing home or group practice facility may also be used to purchase equipment.

The supplemental loan for a project with a HUD-insured or HUD-held mortgage may not exceed 90 percent of the estimated value of the improvements, additions, or equipment. A loan for a project with a HUD-held mortgage may exceed the remaining term of the mortgage and extend for 40 years.

Eligibility: 4,5

Graduated Payment Mortgage Program (Section 245(2))

The Graduated Payment Mortgage (GPM) program facilitates early homeownership for households that expect their incomes to rise by insuring loans that allow homeowners to make smaller monthly payments initially and to increase their payment size gradually over time. It is applicable to single family housing proposed, under construction, or scheduled for substantial rehabilitation.

The maximum insurable amount is the lesser of: (1) maximum Section 203(b) limits; (2) 97 percent of the first \$25,000 of value and closing costs, plus 95 percent of the remainder; or (3) 97 percent of the appraised value and closing costs of the property, minus all of the deferred interest which would accrue during the graduated term. The term of the mortgage is limited to 30 years.

There are five basic GPM plans which vary the rate of monthly payment increases (from 2 to 7.5 percent) and the number of years over which the payments increase (5 or 10 years). The greater the rate of increase, or the longer the period of increase, the lower the mortgage payments are in early years. After a period of 5 to 10 years, depending on which is selected, the mortgage payments level off and stay at that level for the remainder of the loan. GPM payments increase each year, not each month.

Section 245(b) is a similar program which is limited to first-time homeowners or those who have not owned a house in the last three years.

Eligibility: 6

Low Income Rental Rehabilitation (Section 312)

Provides financing through housing authorities to property owners for rehabilitation of "Existing" rental housing. The owners must sign a contract to keep the units available for Section 8 tenants for a period of 3-4 years.

Eligibility: 2

Urban Development Action Grant (UDAG)

Grants to designated, economically distressed cities and urban counties for residential, commercial, or industrial projects that stimulate private investment. Eligibility is determined by a combination of factors: loss of population and jobs, stagnating or declining tax base, high percentage of poverty, low per capita income change, high unemployment, and deteriorated

housing. Housing projects linked to economic development projects (e.g., mixed uses) are eligible activities.

Eligibility: 1

Housing Voucher Demonstration

This voucher program, similar to the Section 8 Existing Housing Program, additionally provides very-low income families with a greater choice in the selection of a rental unit. The voucher permits families to rent units beyond the fair market rents. Monthly housing assistance payments will be based on the difference between a payment standard for the area and 30 percent of the family's monthly income. For families selected for assistance, preference will be given to those who are occupying substandard housing, are voluntarily displaced, or are paying more than half of their income for rent.

Eligibility: 6

Mortgage Insurance: Land Development (Title X)

This program insures mortgage loans to finance the purchase of land and the development of building sites for subdivisions, including water and sewer systems, streets and lighting, and other installations needed for residential communities. Nonresidential buildings, such as schools or commercial buildings, are not included except for water supply and sewage disposal installations, clubhouses, and parking garages owned and maintained jointly by property owners.

The maximum amount of insurance may not exceed the lesser of: 85 percent of HUD's estimate of the value of the property upon completion of the development, or the total of: (1) HUD's estimate of the development cost, plus (2) the greater of acquisition cost of all outstanding indebtedness secured by the land, plus (3) 50 percent of the difference between the applicable amount in item 2 and HUD's estimate of the value of the land before development; or 80 percent of the estimated value of the land before development plus 90 percent of estimated cost of development. The mortgage term may extend for ten years.

Eligibility: 4,5

Community Development Block Grant (CDBG)

Through the CDBG, HUD provides grants and loans to local government for funding a wide range of community development activities. No local match is required.

As amended under the 1974 Housing and Community Development Act, the CDBG program is a consolidation of former categorical grant programs including Urban Renewal, Neighborhood Development Grants, Model Cities, Water and Sewer Grants, Neighborhood Facilities Grants, Open Space Grants, Rehabilitation Grants, and Historical Preservation Grants.

Although spending priorities are determined at the local level, the stated purpose of the law is to provide adequate housing, a suitable living environment, and expanded economic opportunities for persons of low- and moderate-income. A minimum of 51 percent of the CDBG funds provided must be used for the support of activities that benefit low- and moderate-income persons.

Basic eligible activities include, but are not limited to: (1) acquisition and disposition of real property, (2) public facilities and improvements, (3) slum clearance activities, (4) public services, (5) interim assistance, (6) payment of non-federal share of a grant-in-aid program, (7) urban renewal completion, (8) demolition and relocation, (9) removal of architectural barriers to the physically disabled, (10) privately owned utilities, and (11) improvement of sites for assisted housing.

CDBG assistance may be used for the following rehabilitation and preservation activities: (1) rehabilitation of public residential structures, (2) modernization of public housing, (3) rehabilitation of private properties, (4) temporary relocation assistance, (5) code enforcement, and (6) historic preservation.

Except in limited circumstances, Community Development Block Grants may not be used for new construction of housing.

Appropriations of Community Development Block Grant funds are made by Congress annually. The first 3 percent of each year's appropriation goes directly into the discretionary fund of the Secretary of Housing and Urban Development. Those monies are distributed nationwide for technical assistance, emergency housing, and other special projects at the discretion of the Secretary.

The remaining 97 percent of each annual Community Development Block Grant appropriation is divided as follows: 70 percent to urban areas and 30 percent to rural areas. From the urban share, "entitlement" applicants (generally defined as cities of at least 50,000 population and counties of at least 200,000 in population, excluding entitlement cities) receive funds determined by the locality's relative number and percentage of population, households in poverty, and households experiencing overcrowding, growth lag, and age of housing. Entitlement communities are allocated funds annually, but must make yearly certifications and submissions to HUD which conform with the 1974 Housing and Community Development Act, as amended, and the applicable regulations. Cities with populations under 50,000 may execute an agreement with their respective counties to include the city's population as a part of the total county population for the purposes of the entitlement allocation.

Cities and counties not meeting the entitlement population requirement are eligible to participate in the "Small Cities" discretionary program. These jurisdictions must compete for a limited amount of funds administered through state governments.

In order to receive its annual entitlement grant, a locality must submit to HUD, the required certifications (agreements to comply with an applicable laws and regulations including the Civic Rights Act and citizen participation requirements), the necessary HUD approved Housing Assistance Plan (HAP), and a copy of its final statements of community development objectives and proposed copy of its final statements of community development objectives and proposed use of CDBG funds. The HAP must include a survey of existing housing stock, a quantification of the housing assistance needs of lower income households, the general location of proposed new construction and rehabilitation activities, and an annual and/or three year goals for meeting the housing assistance needs of lower income households. Every third year, the locality must submit a HAP detailing three-year goals. Each year, the locality must submit annual goals and a report evaluating progress in meeting the previous years goals.

If the locality makes a complete submission within the established deadlines, HUD will make a full grant award. Grant awards may be reduced or denied if HUD makes a determination that the grantee has failed to carry out its previous approved activities in a timely manner or failed to confirm to the requirements of the law.

Eligibility: 1

Section 108

Section 108 allows HUD to guarantee loans to local governments to be used for the acquisition or rehabilitation of property to stimulate industrial, commercial, or residential development. Recipient local governments must, in turn, pledge current and future Community Development Block Grant (CDBG) funds as security for such loans. The maximum amount that may be guaranteed is three times a city's/county's annual entitlement grant.

CDBG recipients are eligible for Section 108 loan guarantees to finance (1) acquisition of real property for community and economic development purposes; (2) rehabilitation of real property owned or acquired by the local government; and (3) payment of related expenses (interest, relocation, clearance, and site improvements). Application for the guarantee can be made as part of the block grant proposal for a given year. Funds cannot be used for new construction.

The advantage of this program is that it can make a large amount of money available relatively quickly without a city having to wait for receipt of a given year's block grant.

The guaranteed debt takes the form of a note issued under HUD's guidance by designated public agencies to a private lending institution approved by HUD. The terms of the note are specified by HUD; the interest rate is set just slightly above the Treasury Department's borrowing rate. The money may be drawn down as soon as HUD approves the guarantee, but it may only be used to meet current financing needs for approved activities. The entire amount of the loan may be obtained up-front.

Loans guaranteed by Section 108 must be repaid within six years, although the city has some latitude in determining the means of repayment. Repayment terms must be approved by HUD in advance of the project.

Although rates are higher than those on most tax exempt obligations, the program offers potential in the area of land assembly and can give local governments greater mileage from CDBG funds by performing needed activities prior to their receiving the entitlement funds.

Eligibility: 1

Solar Energy and Energy Conservation Bank

The purpose of this HUD program is to reduce the nation's dependence on foreign sources of oil by offering grants or subsidized loans to owners and tenants in residential, commercial, and agricultural buildings for the purchase and installation of conservation and solar measures. The Solar Energy and Energy Conservation Bank operates through states and provides financial assistance to consumers for solar and energy conservation improvements.

The amount of assistance is based on the applicant's income level for energy conservation improvements; for solar improvements, it is based on the amount of energy saved by the improvement. Individuals must certify that projected earnings fall within a certain range relative to the area median income in order to be eligible for subsidies. In most cases, an energy audit must also be performed. For some solar improvements, a certified design analysis must be performed. The applicant must also certify that a federal tax credit will not be claimed if the Bank provides a subsidy, that minimum property standards will be met for new or rehabilitated buildings, that the installation was completed, and must disclose other federal assistance sought or obtained.

At least 50 percent of available funds will be allocated, with the balance going into a reserve fund. The percentage of allocated funds for a state is determined by a calculation, involving the state's incidence of lower income households, average energy consumption, and other factors.

Individuals are required to certify that sufficient funds are available to match a grant in meeting the cost of the installation.

Individuals can apply directly to counties for funding.

Eligibility: 6

Farmer's Home Administration (FmHA)

The Farmers Home Administration, an agency of the U.S. Department of Agriculture, provides grants and low-cost loans to improve housing in rural areas. Potential recipients include rural residents, government entities, and both nonprofit and profit-motivated sponsors.

Unlike HUD programs which generally operate through banks and other approved lending institutions, FmHA itself makes loans directly to qualified applicants.

FmHA grants and loans (except those under the farm labor program) are made only in rural areas--generally defined as areas with populations under 10,000 or up to 20,000 in credit-scarce regions outside a Metropolitan Statistical Area.

Individual Homeownership (Section 502)

Provides insured loans to families of low- and moderate-income, including senior citizens, who need adequate housing. Interest rates vary according to the cost of government borrowing and the maximum term for repayment is 33 years. Interest credit, which may reduce interest to as low as one percent, may be available to qualified low-income borrowers.

Eligibility: 6

Home Repair Loans (Section 504)

Very-low income homeowners whose houses are severely deficient may be eligible for grants or low-interest loans to make their houses safe and adequate for habitation and remove health hazards. A maximum loan of \$7,500, a maximum grant of \$5,000, or a maximum loan-grant

combination of \$7,500 may be available to help very-low income elderly homeowners make necessary repairs to their homes. Applicants must be 62 years of age or older to qualify for grant assistance.

Eligibility: 6

Rental Housing Loans (Section 515)

These insured loans provide modernized rental or cooperative housing for persons with low and moderate incomes and for those age 62 and older in rural communities of not more than 10,000 population. Such loans may also be available in communities between 10,000 and 20,000 population if the facility is not within a SMSA. The loans are repayable in not more than 50 years. Provisions are made for interest reductions under certain circumstances so that low-income tenants may pay a rent within their means. Rent paid by low-income tenants also can be supplemented through a rental assistance program administered by FmHA or HUD's Section 8 rent subsidy program.

Eligibility: 4,5

Farm Labor Housing Loans and Grants (Section 514/516)

This program provides a combination of grants and loans to finance construction, rehabilitation, or purchase of rental housing for farmworkers. Loans and grants may be used to finance infrastructure such as water supply systems and wastewater facilities as well as to develop support facilities such as central cooking and dining facilities, small infirmaries, laundry facilities, and day care centers.

A grant of up to 90 percent of the cost of the project is made, with the remainder loaned at 1 percent interest. Loans are repaid over a 33-year term.

Loans are available to farmers and farmer associations. Both loans and grants are available to public and private nonprofit corporations, and to nonprofit farmworker organizations. Grants are available to eligible applicants only when there is a pressing need and when it is doubtful that such facilities could be provided without grant assistance.

Eligibility: 4 (and farmers and farmer associations)

Rental Assistance Program (Section 521)

This program provides rental assistance to low-income rural families and senior citizens who are living in FmHA-funded projects. The program subsidizes rents that exceed 30 percent of adjusted annual incomes. The subsidy amount is determined by formula, depending on how the FmHA rental project was originally funded.

All FmHA-financed farm labor housing loan and/or grant recipients who are public bodies, nonprofit organizations, or nonprofit organizations of farmworkers are eligible to participate in this program. Rural rental housing loan borrowers who agree to operate the housing on a limited profit or nonprofit basis are also eligible. FmHA borrowers using HUD's Section 8 Existing Housing Assistance Payments may also participate in the FmHA rental assistance program.

Priority will be given to families in existing projects who are paying the highest percentage of income toward rent. In new projects, priority will be based on the date a request for rental assistance is made to FmHA by the borrower (project owner).

The responsibilities of an eligible borrower are:

- Borrowers must have an approved lease with the family receiving rental assistance.
- Initially and annually, borrowers must submit a "Tenant Certification" for each tenant.
- Borrowers must verify income reported by tenants.
- Borrowers must have their operating budgets approved by FmHA to be eligible for rental assistance.

The term of the rental assistance agreement is five years. Agreements can be renewed for periods of up to five years.

Eligibility: 1,4

Rural Housing Preservation Grants (Section 533)

This program, established in 1985, is designed to assist very low- and low-income rural homeowners to repair and rehabilitate their housing. Governmental entities and nonprofit corporations are eligible to receive and administer housing preservation grants to establish housing rehabilitation projects. At least 80 percent of the grant must be used to provide loans, grants, or other assistance to homeowners to pay any part of the cost of repairing or rehabilitating their homes. Twenty percent may be used to hire personnel to run the housing rehabilitation project and for other administrative expenses.

Housing Preservation grants are intended to make use of and leverage any other available housing programs which provide resources to very low- and low-income rural residents to bring their homes up to code standards.

Housing Rehabilitation Projects must serve areas with a concentration of substandard housing and very low- and low-income families. Other criteria considered in the selection of grant recipients include:

- the applicant's capacity and experience in assisting lower income households and in providing rehabilitation or weatherization services,
- the ability to minimize the use of grant funds for administration, and
- the program addresses an overcrowding problem.

Veterans Administration

The Federal Veterans Administration (VA) guarantees loans to qualified veterans to:

- Buy, build, alter, repair, or improve a home or condominium (including a farm residence to be occupied by the veteran);

- Buy a mobilehome with or without the lot; and
- Refinance existing mortgage loans or other liens on a dwelling owned and occupied by the veteran.

The VA-guaranteed loan is made between the veteran and the lender without charge to the lender. No down payment is required by the VA, although the lender may require one.

VA loans are assumable; however, the veteran is required to certify that he/she will be liable for the loan for its full term. The veteran can be released from liability, upon approval of the loan-assuming buyer by the VA; however, the release does not restore the original loan entitlement to the veteran. Each qualified veteran is normally entitled to one VA loan in his or her lifetime.

For information regarding VA loans, contact:

Loan Guaranty Division - Veterans Benefits Office
Veterans Administration Regional Office
211 Main Street
San Francisco, CA 94105
(415) 974-0149
(800) 652-1240

Home Loans

The maximum guarantee amount for home loans may not exceed 60 percent of the cost of the home (including lot) or \$27,500, whichever is less. There is no maximum or minimum mortgage amount, though most lenders use four times the guarantee amount as a rule of thumb. Loan terms are for 30 years at a fixed rate.

Mobilehome Loans

The maximum loan guarantee for mobilehomes is 50 percent of the cost of the mobilehome or \$20,000, whichever is less. Maximum term for single-wide mobilehomes is 15 years. Maximum loan term for double-wide mobilehomes is 25 years.

Disposal of Foreclosed Homes Program

Houses acquired by the VA through defaults are offered for sale to the general public at market value, with financing guaranteed by the VA, usually at or near VA/FHA interest rates. Down payments are below comparable real estate sales; closing costs are minimal. These homes are sold through real estate brokers, and the VA pays the commission.

Specially Adapted Housing

The VA offers home purchase grants of up to \$32,660 to veterans who have lost the use of lower extremities due to a service-connected disability. The VA has established special feature standards for both newly constructed and existing homes eligible for VA grants. These include

site considerations such as walks, ramps, handrails, garages, and entrances; bathroom and kitchen features; and other interior details, such as doors, windows, corridors, closets, and wall switches.

Eligibility: 6 (Military veterans and their survivors)

Department of Health and Human Services

Low-Income Home Energy Assistance

This program makes funds available to states and other jurisdictions to assist eligible households to meet home energy costs. Grantees then make payments directly to an eligible low-income household or, on behalf of such household to an energy supplier for the cost of home energy. Up to ten percent of these funds may be used for state planning and administration. Up to 10 percent may be transferred to other block grants administered by the Department of Health and Human Services. Fifteen percent may be used for low cost weatherization. There is no requirement to match federal funds with state funds. Allocations to states are based on the percentage of total funds received by a state in FY 81.

Eligible households are those whose income does not exceed the greater of 150 percent of the poverty level or 60 percent of the state median income, or households containing recipients of, or those eligible to receive Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), food stamps, or certain veteran's benefits. In 1984 the average assistance for heating costs was about \$200 per household nationally.

Grantees also provide emergency crisis assistance, assistance with heating and cooling costs, and weatherization assistance.

Eligibility: State, territories, and Indian tribal governments which request direct funding.

Contact: Office of Economic Opportunity
1600 Ninth Street, Suite 340
Sacramento, CA 95814
(916) 322-2940
(800) 433-4327

Community Development Credit Union Revolving Loan Fund (CDCU)

This Department of Health and Human Services program is designed to support community based credit unions in their efforts to stimulate economic development activities which result in increased income, homeownership, and employment opportunities for low-income households, to stimulate community revitalization efforts which result in improved community facilities, housing, and transportation, and to provide needed financial and related services to residents within the communities they serve.

Existing credit unions may be eligible for a maximum loan of \$200,000 and organizations proposing to form a credit union may be eligible for a \$100,000 loan. Loans must be repaid within 5 years. Interest rates on CDCU loans are 4 percentage points below the average market rate for Treasury Notes of comparable duration, or 5 percent per annum, whichever is more.

Loan funds may be used for the following services and activities:

- Improving housing conditions and increasing homeownership through a variety of mechanisms including self-help and cooperative housing developments, assistance in securing mortgages, site development, and construction financing;
- Financial counseling;
- Increasing employment opportunities by aiding existing businesses and promoting the establishment of new business;
- Increasing the membership and the capitalization base of the credit union.

Contact: Office of State and Project Assistance
 Office of Community Services
 Department of Health and Human Services
 200 Independence Avenue, S.W.
 Washington, D.C. 20201
 (202) 653-5675

Department of Energy

Weatherization Assistance for Low-Income Persons

The goal of this program is to insulate the dwellings of low-income persons, particularly the elderly and disabled, to conserve energy and aid those persons least able to afford higher utility costs. Grant money is allocated to states for disbursement to community-based organizations (all private/nonprofit including units of local government). Fund allocation is based on annual heating degree days, cost of energy within the county, the county's low-income population, and its elderly, disabled, and American Indian low-income population. The funds are used for attic insulation, caulking, weather-stripping and storm windows, furnace efficiency modifications, and certain mechanical measures to heating and cooling systems. The maximum expenditure per dwelling unit is \$1,000.

Eligibility: States and, in certain instances, Native American tribal organizations

Contact: Office of Economic Opportunity
 1600 Ninth Street, Room 340
 Sacramento, CA 95814
 (916) 322-2940

STATE PROGRAMS

California Housing Finance Agency (CHFA)

CHFA was created in 1975 to help meet the state's need for housing affordable to low- and moderate-income persons and families. CHFA provides below-market interest rate mortgage capital through the sale of tax-exempt notes and bonds.

For information on CHFA programs, contact:

California Housing Finance Agency
1121 L Street, 7th Floor
Sacramento, CA 95814
(916) 322-3991

Home Mortgage Purchase Program (HMP)

This program provides a 30-year fixed-rate mortgage with monthly mortgage payments (principal and interest) which remain the same until the loan is fully repaid. CHFA commits funds to builders or developers, who in turn make the low interest rate mortgage available to new homebuyers through private lenders. Interest rates vary with each bond sale, but are usually 1.5 to 3 percent below the prevailing market interest rates; HMP interest rates, therefore, may differ among developments. In order to qualify for an HMP loan, the borrower must be a first time homebuyer (or not have owned a home as a principal place of residence during the previous three years), have a moderate income, have the capacity to make a minimum of 5 percent cash downpayment and pay closing costs as required, be able to meet loan underwriting standards, and not have previously obtained a CHFA loan.

Eligibility: 5

Cal-First Home Buyers Program

After a first time homebuyer acquires a first mortgage on a home, a qualified lender can offer a CHFA financed second mortgage that will decrease housing cost payments during the first six years of home ownership. During the following ten years, the mortgage payments increase to repay the second mortgage buy down.

Eligibility: 6

Second Unit Financing Program

A pilot program providing a source of financing for the addition and/or rehabilitation of second units utilizing Title I insured loans, which are limited to a maximum of \$17,500. The second units will provide housing for tenants with incomes not exceeding 80 percent of the median upon initial occupancy. Borrowers will be owner-occupants of detached single family housing whose household incomes upon application do not exceed 120 percent of the median income.

Eligibility: 6

CHFA Self Help Housing Program

CHFA has agreed to provide a source of financing for construction and permanent financing of single family homes built by the self help construction method. Under this program, nonprofit housing organizations supervise families in the construction of their own homes, thereby reducing costs by 20 to 40 percent. Sweat equity serves as the down payment, provided that the loan does not exceed 80 percent of the appraised value.

Eligibility: 4

Multi-Family Rehabilitation and Infill New Construction Program

CHFA developed the multi-family rehabilitation program in 1983 to provide a steady source of tax-exempt financing for use with the Rental Rehabilitation Grant Program, CDBG or other rental rehabilitation efforts, and Section 8 subsidies. The program also enables communities to utilize statewide bond issues, rather than attempting to structure their own smaller, separate bond issues. At least 20 percent of the units developed under this program must be available to low-income renters; however, through use of CHFA's bond funds and local financial resources, the percentage has actually been much higher -- 86 percent as of June 30, 1986.

Eligibility: 1

80/20 Multi-Family Rental Housing Program

As of January 1, 1986, state law requires that all multi-family projects financed with tax-exempt bond proceeds set aside 10 percent of the units for low income tenants and 10 percent for very low-income tenants. Current federal law simply requires that 20 percent of the units be set aside for the low income. The balance of the units under state and federal law may be operated with market rents. CHFA sells state revenue bonds in order to finance rental developments which meet these requirements.

Eligibility: 5

80/20 - State/Local Pilot Rental Housing Finance Program

This program supplies funding which effectively "buys-down" the interest rate on a project's take-out financing. This buy-down, referred to as a feasibility loan, not to exceed \$150,000 per project, will reduce monthly rents and thereby make more housing available to those who fall into low- and very low-income categories. Projects considered for the program must carry with them participation from a sponsoring local government in the 20 percent - 30 percent range. 100 percent of the units in these projects are to be reserved for low- and moderate-income tenants (i.e., no market-rate rentals are allowed).

Eligibility: 4

California Department of Housing and Community Development (HCD)

HCD is the state agency that has principal responsibility for assessing, planning for, and assisting communities to meet the housing needs of low- and moderate-income Californians.

The following section describes in greater detail the housing and community development-related programs and activities of HCD.

For information regarding HCD programs, contact:

Department of Housing & Community Development
Division of Community Affairs
921 I0th Street
Sacramento, CA 95814
(916) 445-4782

State Community Development Block Grant Program

Cities with populations under 50,000 and those counties with populations under 200,000 which do not participate in HUD entitlement programs are eligible to participate in the state CDBG program. CDBG funds may be used for a variety of housing, economic development, public facility, and public service activities.

Eligibility: 1

Deferred Payment Rehabilitation Loan Program (DPRLP)

The DPRLP provides deferred payment loan funds to local government agencies to assist with the rehabilitation of housing for low and moderate income households. The major objectives of the DPRLP are to rehabilitate housing to assure the continued viability of neighborhoods, to eliminate health and safety hazards, to prevent overcrowding, and to ensure the availability of low-cost housing.

Eligibility: 1,4

Special User Housing Rehabilitation Program (SUHRP)

The SUHRP provides three percent 30-year deferred payment loans, which provide "up-front" subsidies for the rehabilitation and/or acquisition of substandard housing. SUHRP funds may be used for apartments which will be occupied by the elderly, for group residences and apartments which will be occupied by the physically, developmentally, or mentally disabled, and for residential hotels which will be occupied by low- or very-low income persons.

Eligibility: 1,4,5

California Self-Help Housing Program (CSHHP)

The CSHHP (formerly the California Housing Advisory Service) provides grants and loans to self-help housing organizations that assist low and moderate income families in the building or rehabilitating of their own homes. Both mortgage and technical assistance funds are available. CSHHP technical assistance grants are used to cover the various administrative and training costs associated with the provision of technical assistance to self-help households. The services

include training and supervision of self-help builders, loan packaging and counseling services, and workshops. Mortgage assistance funds are used to reduce the cost of the self-help units.

Eligibility: 1,4

Senior Citizens Shared Housing Program (SCSH)

The SCSH program provides grants to local government agencies to assist seniors in finding others with whom they can share housing. Services funded by the program include outreach, information and referral, client counseling, placement, and follow-up. The program results in reduced housing costs, prevention of premature institutionalization, efficient use of existing housing stock, and increased security and companionship for seniors.

Eligibility: 1, 4

Urban Predevelopment Loan Fund (PLP)

The PLP provides seven percent loans to local government agencies and nonprofit corporations. The loans can be used for a variety of predevelopment expenses incurred in securing long term financing for the production or rehabilitation of subsidized low-income housing in urban areas. Loan terms range from one to three years and proceeds may be used to purchase land or land options, to pay advance fees for architectural, engineering, consultant, and legal services, to pay permit, bonding, and application fees, and to finance site preparation (including water and sewer development). Loans are also made to eligible borrowers for land purchase to "land-bank" sites for future development of low-income housing. Loans may not be used for administrative expenses or construction financing.

Eligibility: 1,2,4

California Homeownership Assistance Program (CHAP)

Provides up to 49 percent of the purchase price of a dwelling in the form of a mortgage participation loan with an institutional lender to enable eligible households to purchase housing they would otherwise be unable to afford. When the unit is sold, the State shares in the sales proceeds in proportion to its original investment. The balance of the financing comes from private or other public lending institutions. Under this program, HCD may assist (1) renters to purchase their units who otherwise would be displaced by condominium or stock conversions; (2) mobilehome park residents to purchase their spaces if the park is to be converted to a condominium or stock cooperative; (3) households to purchase a mobilehome placed on a permanent foundation; (4) eligible households to purchase mobilehomes placed on permanent foundations; and (5) stock cooperatives or non-profit corporations to develop or purchase mobilehome parks.

Eligibility: 6

Mobilehome Park Assistance Program (MPAP)

The MPAP provides financial and technical assistance to low income mobilehome park residents or to organizations formed by park residents who wish to own and/or operate their mobilehome parks. MPAP loans bear a seven percent interest rate and conversion loans must be repaid

within three years, but repayment of blanket and individual loans may be scheduled for up to 30 years.

Eligibility: 6

Rental Housing Construction Programs (RHCP)

The RHCP was designed to stimulate the production of affordable, well-constructed, energy efficient rental units available to low- and very low- income households. The program funds are utilized through three basic financing approaches: (1) a direct financing component which channels HCD funds directly to local entities; (2) the Rural Rental Assistance component, which uses RHCP funds to writedown rents on projects financed through the FmHA 515 Program; and (3) the CHFA set-aside.

Eligibility: 1

Emergency Shelter Program (ESP)

The ESP provides direct grants to local government agencies and nonprofit corporations that shelter needy people and families on an emergency basis. Eligible activities include rehabilitation/renovation, expansion of existing facilities, site acquisition, equipment purchase, one-time rent vouchers to prevent eviction, and administrative costs (no more than two percent of any single grantee award). New construction is not an eligible program activity.

Eligibility: 1,4

Independent Living Housing Assistance Program (ILHAP)

The ILHAP provides funds in the form of housing assistance payments to agencies that provide support services to the developmentally, mentally, or physically disabled which are designed to provide a transition to independent living. Any disabled individual who is in need of a transitional, independent living skills training program, may be a tenant of a dwelling unit receiving housing assistance payment benefits. Housing assistance will be provided to lease group homes and units of apartment complexes.

Eligibility: 1

Franchise Tax Board

Homeowner and Renter Assistance Law

The Homeowner and Renter Assistance Law provides property tax relief and rental assistance to low-income citizens 62 years of age or older, and to totally disabled or blind persons of any age.

The State refunds a portion of the property tax on a home occupied by a senior or disabled homeowner, depending on the value of the home and the homeowner's income. Homeowner Assistance is granted only on the first \$34,000 of the full value (formerly \$8,500 of the assessed value), as shown on the property tax bill, less the Homeowners or Veterans Exemption. No assistance is provided on that part of a residence's full value which exceeds this amount.

To be eligible for the Homeowner Assistance Program, a homeowner must:

- Be 62 years of age or older, or totally disabled, or blind as of December 31 of the year claimed;
- Have been a resident of California on or before December 31 of the year claimed;
- Have owned and occupied the home on December 31 of the year claimed; and
- Have had a household income for the year claimed of no more than \$12,000. (Household includes the homeowner and all individuals, except minors, students, and renters who lived in the home during the year claimed.)

Claims must be filed with the Franchise Tax Board between May 16 and August 31 following the year claimed.

Renter Assistance provides relief to renters who:

- Were 62 years of age or older or totally disabled or blind as of December 31 of the year claimed;
- Were California residents on December 31 of the year claimed;
- Occupied a rented California residence between January 1 and December 31 of the year claimed;
- Paid at least \$50 per month in rent for the year claimed; and
- Had a household income for the calendar year claimed of not more than \$12,000. (Household members include the renter, the renter's spouse, and all other individuals who lived in the rented dwelling from January 1 to December 31, except for minors, qualified students, other renters, and the owner of the rented premises.)

The claim must be filed with the Franchise Tax Board between May 16 and August 31 following the year claimed.

Persons who received welfare benefits or claimed the renter's credit allowed by the California Personal Income Tax are eligible for renter assistance if all of the qualifications listed above are met.

California renters who filed individual income tax returns are eligible to receive a renters' credit of \$60 for single persons and \$137 for married couples (filing joint claims) or unmarried heads of household if:

- The renter was a California resident on March 1 of the year for which the credit is claimed; or

- The individual, as of March 1, rented and occupied, as a principal place of residence, a house or dwelling in California (owning and occupying a mobilehome situated on rented land satisfies this requirement).

The Renters Credit is not allowed if:

- The rented property was exempt from property taxes, unless the renter was required to pay property taxes on his or her possessory interest in the residence;
- The renter lived with and was claimed as a dependent for income tax purposes by another person; or
- The renter or spouse was granted the homeowners' property tax exemption unless the spouse maintained a residence separate from that of the renter for the entire taxable year.

A person who qualifies for the Renters Credit may also file for Renters Assistance, but should not receive the Homeowner Assistance or the Homeowners Property Tax Exemption.

For information contact: Franchise Tax Board
P.O. Box 1588
Sacramento, CA 95807
(916) 369-0500

Solar Energy Credit

An individual may qualify for a tax credit if he or she installed a solar energy system or added to a previously installed system, or carried over this credit from 1982. The California credit is substantially different from the federal credit. To be eligible for a tax credit, the system must conform with the guidelines established by the California Energy Commission.

Individuals may qualify for a tax credit if energy conservation measures apart from a solar energy system were installed, or if this credit were carried over from 1983.

Energy conservation measures include insulation, weather stripping, pool covers, low-flow shower heads, and other items approved pursuant to the Federal Residential Conservation Service Plan.

The solar energy and energy conservation measure credits sunset on January 1, 1987 unless a statute, chaptered before this date, deletes or extends the date.

Contact: Franchise Tax Board
P.O. Box 1588
Sacramento, CA 95807
(800) 852-5711

California Energy Commission
1516 9th Street
Sacramento, CA 95814
(800) 852-7516

Tax Credit for Removal of Architectural Barriers

Sections 17237.5 and 24380 of the Revenue and Taxation Code permit taxpayers to deduct the entire cost of repairing or remodeling "any building, facility, or transportation vehicle owned by the taxpayer to facilitate its use by disabled or elderly individuals."

The deduction must be taken for the year in which the remodeling or repair work took place, and must be in lieu of any other tax deduction for remodeling or repair to correct wear and tear or obsolescence. Deductions cannot exceed \$25,000 in any taxable year.

Repairs must be made in compliance with the standards prescribed in Section 4450-51 of the Government Code.

Contact: Franchise Tax Board
P.O. Box 1588
Sacramento, CA 95807
(916) 369-0500
(800) 852-5711
(800) 852-7050

Department of Veterans Affairs

The Department of Veterans Affairs, through its Division of Farm and Home Purchases, administers the Cal-Vet Loan program, which assist qualified California war veterans to purchase farms and homes at reasonable financing costs. Funds are obtained through the sale of General Obligation bonds. These bonds and the administrative costs of the program are repaid by the veterans who participate.

Cal-Vet Loan Program

To qualify for a Cal-Vet loan, a veteran must have been born in California or have been a bona fide resident of California at the time of entry or re-entry into active military duty. He/she must have served at least 90 days on active duty, unless discharged because of service-connected disability, and must have served during a qualifying war period. Discharge or release from active duty must have been under honorable conditions.

<u>Qualifying Properties</u>	<u>Maximum Loan Allowed</u>
Single family homes, including condominiums and townhouses	\$ 75,000
Mobilehomes on land owned by the borrower	\$ 75,000
Mobilehomes in an approved mobilehome park	\$ 55,000
Working farm producing sufficient income to provide loan and tax payments	\$200,000

Homes equipped with solar energy heating devices may be approved for up to an additional \$5,000 loan.

Where the purchase price is \$35,000 or less, the Department may loan 97 percent of the appraised value of the property. Where the purchase price is greater than \$35,000, the Department may loan 95 percent of the appraised value of the property, but in no event may the loan be more than the purchase price or the maximum stated above, whichever is less.

On farm properties, the loan amount cannot exceed 95 percent of the Department's appraised value, which is based upon net income from agricultural production.

A veteran who plans to have a home constructed (construction loan) and later to have it financed through the Cal-Vet program should contact a Cal-Vet district loan office for detailed information before proceeding, as this type of loan is strictly regulated by both state and federal laws.

The interest rate on Cal-Vet loans is variable over the term of the loan. Most Cal-Vet loans have a maximum term of 25 years.

Cal-Vet Loan information is available at (800) 952-5626.

Disabled Veterans' Tax Exemption

Totally disabled veterans who own and occupy a single-family dwelling, a condominium, a cooperative, or a houseboat, or occupy a state-licensed mobilehome on their own land as of March 1 each year, are exempt from property tax up to \$100,000 of the assessed value of the property.

If the veteran is blind or has lost the use of two or more limbs (but has not been classified as totally disabled), the exempt amount is \$40,000 of assessed value. If the household income is not more than approximately \$24,000 a year (\$34,000 if the veteran filed and qualified for either the \$40,000 or \$60,000 exemption in 1983), the exemption amount is \$60,000 of the assessed value.

There is a one-time-only filing procedure for the \$40,000 while annual filing is required for the \$60,000 exemption. If the claim is made on April 15, the full exemption is available. If a claim for the \$40,000 or \$60,000 exemption is filed between April 16 and December 1, 80 percent of the exemption is available. There is no late filing for the \$100,000 exemption. Claims filed after December 1 are not eligible for the exemption until the following year.

The Disabled Veterans' Exemption will terminate if:

- The property was not the principal place of residence as of 12:01 a.m. on March 1 of the year claimed;
- The disability is no longer rated a 100 percent disability by the rating agency;
- Visual acuity in both eyes (if basis for exemption was blindness) is no longer less than 5/200; or, if the basis were loss of use of two limbs, use of one or both has been restored; or
- Claimant was a surviving spouse of a disabled veteran and has remarried.

For additional information on the Disabled Veterans Property Tax Exemption, contact the Stanislaus County Assessor's office.

Board of Equalization

Homeowners' Property Tax Exemption

Administered by the State Board of Equalization through county assessors' offices, the Homeowners Property Tax Exemption has been in existence since 1968. This provision of the tax code allows a specified amount of the assessed value of a homeowner's property to be exempted from property tax. This amount is currently \$7,000 if a claim is filed between March 1 and April 15, and \$4,600 if the claim is filed between April 16 and December 1. Once the December 1 deadline has passed, no exemption may be allowed for that particular tax year.

There is a one-time-only filing procedure and homeowners who continue to occupy their property on March 1 of the year claimed need not file again. Claims are mailed to new homeowners by March 15 each year.

To qualify for this exemption, a claimant must:

- Own and occupy a dwelling as the principal place of residence as of March 1; and
- File or have on file a claim for homeowners property tax exemption with the county assessor in the county in which the property is located.

Note: Persons who qualify for the Homeowners Property Tax Exemption may also claim Homeowners Assistance from the Franchise Tax Board; however, they may not claim either the Renters Credit or Renter Assistance from that Agency.

For additional information on the Homeowners Property Tax Exemption, contact the Stanislaus County Assessor's office.

LOCAL PROGRAMS

Non-Profit Housing Development Corporation

A non-profit housing development corporation (HDC) is a corporation created specifically to promote, assist, or sponsor housing for low and moderate income people. A non-profit HDC does not build "public housing." Rather, it builds or rehabilitates privately-owned housing for people who cannot afford market rate housing but whose incomes are generally above the poverty level. Non-profit HDCs can build housing for families, the elderly, and the disabled. HDCs may sponsor limited equity cooperative housing.

Landbanking

Landbanking is the purchase of developable land by a jurisdiction for future use. Many jurisdictions have used landbanked sites to provide affordable housing for low and moderate income people. There are two variations of the landbanking process. A developer may go to the locality with a parcel in mind which he/she cannot afford to buy, and the locality will buy it for him/her. Alternatively, the community may choose a parcel and keep it until a developer comes along to build on it. In this case, the jurisdiction has several options regarding control of the site. The most obvious is outright purchase, but this may not be the best way for the locality to use the funds set aside for landbanking. Other options include: the option to purchase, at a stated price under stated conditions; the option of first refusal, under which the property owner agrees to notify the community in case an offer is made by a second party to purchase the land; and a lease, which is useful if the property owner is unwilling to sell but is willing to develop the land. Sources of funds for landbanking have usually come from a jurisdiction's Community Development Block Grant (CDBG) monies, although money from a community's general fund can and has been used.

Limited Equity Cooperatives

A limited equity cooperative provides low and moderate income residents with the opportunity for affordable home ownership. In a limited equity co-op, like a market co-op, the residents form a non-profit corporation which has as many shares as there are units in the building. The units may be converted from an existing rental building, or a new building may be constructed as a limited equity cooperative.

To live in a co-op, the residents purchase a share by making a down-payment. The residents' monthly payment is their share of the mortgage payment plus the costs of utilities and maintenance. A share entitles co-op members to the use of common areas and their dwelling unit. While they do not own their dwelling unit, co-op members may deduct their share of interest and tax payments when filing tax returns because they are part owners of the building.

Limited equity co-ops differ from market co-ops primarily in that the cost of buying a share in a limited equity co-op is generally measured in the hundreds rather than thousands of dollars and can rise only a certain amount each year. The point of limiting the equity build-up is to remove the units from market forces (unlike market rate co-ops), as well as from the rent increases of a for profit owner (unlike most rentals). Thus, the dwelling is kept permanently affordable to low and moderate income people.

Mortgage Revenue Bonds (MRBs)

Tax exempt mortgage revenue bonds are a source of funds which may be used to raise money for mortgage insurance and mortgage loans. The money that is generated by the bonds can then be issued at below market rates, for both single-family owner-occupied homes and multi-unit rental housing. The loans may be used for rehabilitation or new construction. Outstanding mortgage loans are collateral for the bonds. Housing finance agencies are created to issue such bonds, but other agencies, such as housing authorities, local governments, redevelopment agencies, and the State may also do so. The interest rate on the mortgage loans issued by these agencies is usually around 1-1/4 percent above the interest rate paid to bondholders. Private lenders originate the loans, send them to the city of agency, and service the loans. Private lenders collect a portion of the 1.25 percent for their services.

Mortgage Credit Certificates (MCCs)

Local housing finance agencies may also now issue Mortgage Credit Certificates in lieu of Mortgage Revenue Bonds. Home purchasers who receive MCCs are entitled to an income tax credit equal to a specified percentage of the interest they pay during the tax year on the mortgage on their principal residences.

APPENDIX C

SPECIAL HOUSING REQUIREMENTS

In addition to requiring each city and county adopt a housing element, the California Legislature has enacted some very specific requirements to ensure that local regulatory procedures do not constrain housing development. This appendix summarizes these special housing mandates.

Findings on Housing Limits

Any city or county adopting or amending its general plan in a manner that limits the number of units that may be constructed on an annual basis must make specified findings concerning the efforts it has made to implement its housing element and the public health, safety, and welfare considerations that justify reducing the housing opportunities of the region (Government Code Section 65303.8).

Housing Disapprovals and Reductions

When a proposed housing development complies with applicable local policies and regulations in effect at the time the application is determined to be complete, the local agency may not disapprove the project or reduce its density unless it makes specified findings (Government Code Section 65589.5).

Solar Energy Systems

Cities and counties may not enact zoning provisions that effectively prohibit or unnecessarily restrict the use of solar energy systems, except for the protection of public health or safety (Government Code Section 65850.5). Allowable "reasonable restrictions" include those that do not significantly increase the cost of the solar system or significantly decrease its efficiency and those that allow for an alternative system or comparable cost and efficiency.

Secondary Residential Units

To encourage establishment of secondary units on existing developed lots cities and counties are required to either (1) adopt an ordinance based on standards set out in the law authorizing creation of second units in residentially zoned areas; or (2) where no ordinance has been adopted, allow second units by use permit if they meet standards set out in the law (Government Code Section 65852.2). Local governments are precluded from totally prohibiting second units in residentially zoned areas unless they make specific findings.

Mobilehomes in Single Family Zones

Cities and counties may not totally prohibit installation of mobilehomes on permanent foundations on lots zoned for single-family dwellings (Government Code Section 65852.3). However, cities and counties may specify those single-family zoned lots upon which mobilehomes may be placed. Cities and counties may subject mobilehomes to the same standards that apply to single-family dwellings.

Mobilehome Parks - Permitted Uses

A mobilehome park is deemed by state law to be a permitted use on all land general planned and zoned for residential use (Government Code Section 65852.7). However, cities and counties may regulate mobilehome parks by use permit.

Growth Limiting Ordinances

In adopting zoning ordinances, cities and counties must consider the effects of such ordinances on the housing needs of the region and balance these regional needs against the needs of their residents for public services and the available fiscal and environmental resources (Government Code Section 65853.6). Any city or county adopting a zoning ordinance that limits the number of housing units that may be constructed on an annual basis must make findings concerning the public health, safety, and welfare considerations of the city or county that justify such action.

Mobilehome Park Conversions

Any person proposing to convert a mobilehome park to another use must prepare and file a report on the impact of the conversion on the displaced mobilehome park residents (Government Code Section 65862.7 and 66427.4). The city or county with jurisdiction must consider the impact report at a public hearing and may require as a condition of approval of the conversion that the project sponsor mitigate the impacts of displacement.

Notification on Mobilehome Park Conversions

A city or county that has received an application for a mobilehome park conversion must notify the applicant at least 30 days prior to any hearing or action of state and local requirements for applicant notification or mobilehome owners and park residents concerning the proposed change (Government Code Section 65863.8). No action may be taken on the application until the applicant has satisfactorily verified that mobilehome owners and park residents have been properly notified.

Mobilehome Park Conversion Mitigation

Cities and counties when approving a subdivision map for conversion of a mobilehome park must mitigate the impact of such conversion by (1) zoning for additional replacement housing; (2) making a finding that there is adequate space in existing mobilehome parks or adequate land zoned for mobilehomes development; (3) requiring the developer to mitigate the impact; or (4) making a finding that mitigation is infeasible (Government Code Section 66427.4).

Limitations on Development Permit Fees

Fees charged by local public agencies for zoning changes, variances, use permits, building inspections, building permits subdivision map processing, or other planning services may not exceed the estimated reasonable cost of providing the service for which the fee is charged (Government Code Sections 54990 and 65909.5). Fees may exceed this limit only with a two-thirds vote of the electorate.

Residential Zoning

Cities and counties must zone a sufficient amount of vacant land for residential use to maintain a balance with land zoned for non-residential use (e.g., commercial and industrial) and to meet the community's projected housing needs as identified in the housing element of the general plan (Government Code Section 65913.1).

Residential Subdivision Standards

Cities and counties may not impose standards for design and improvement for the purpose of making the development of housing for any and all economic segments of the community infeasible (Government Code Section 65913.2).

Coordinated Permit Processing

Each city and county must designate a single administrative entity to coordinate the review and decision-making and provision of information regarding the status of all applications and permits for residential, commercial, and industrial developments (Government Code Section 65913.3).

Density Bonuses

When a developer agrees to construct at least 25 percent of the total units in a housing development for low or moderate income households, 10 percent of the total units for lower-income households, or 50 percent of the total dwelling units for qualifying senior citizens, the city or county must either grant a density bonus or provide other incentives of equivalent financial value (Government Code Section 65915). The density bonus must increase by at least 25 percent the other maximum allowable density specified by the zoning ordinance and the land use element of the general plan. Each city or county must set up procedures for carrying out these provisions.

Density Bonuses for Condominium Conversions

When a developer proposing to convert apartments to condominiums and agrees to provide at least 33 percent of the total units in the proposed condominium project for low or moderate income households, at least 15 percent of the total units for lower income households, or at least 50 percent for qualifying senior citizens, the city or county must either grant a density bonus or provide other incentives of equivalent financial value (Government Code Section 65915.5). The density bonus must increase by at least 25 percent over the number of apartments to be provided within the existing structure proposed for conversion.

CEQA and Density Reductions

Cities and counties may deny or reduce the density set forth by the general plan for a housing project only as a mitigation measure for a specific adverse impact upon public health or safety pursuant to the California Environmental Quality Act and only when there is no other feasible mitigation that would achieve comparable density results (Public Resources Code Section 21085).

Residential Energy Conservation

Cities and counties are required to adopt energy conservation standards for new residential dwellings (excluding apartment houses with four or more stories and hotels). This law went into effect June 15, 1983.

Incentives for Low-Income Housing Development

Local governments are required to provide specified incentives, which may include reduction of site development standards, density bonuses, mixed use zoning approval, or other incentives which result in identifiable cost reductions, for developers who set aside 20 percent or more of a development's units for low-income households. (Government Code Section 65913.4) Any density bonus granted pursuant to this provision is an alternative to, and not in addition to, an otherwise granted density bonus.

Redevelopment Replacement Housing

Redevelopment plans must provide replacement housing on a "one-for-one" basis for low and moderate income persons displaced by redevelopment activity. (Health and Safety Code Section 33334.5).

Tax Increment Funds for Housing

Redevelopment agencies must use at least 20 percent of tax increment revenues generated by a redevelopment project to increase and improve the community's supply of housing for persons of low and moderate income (Health and Safety Code Section 33334.2). Certain findings may be made by the agency to set aside less than 20 percent if no need exists for such housing, if less than 20 percent is required to meet the need, or if a substantial effort to meet the needs is being made.

U.C. BERKELEY LIBRARIES



C124881101

